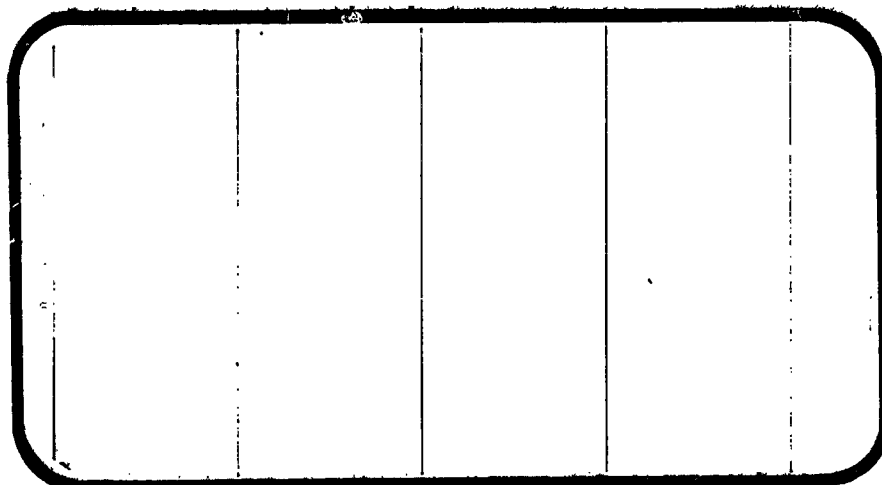




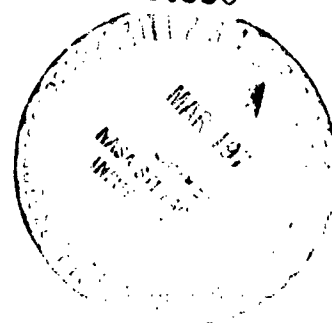
# NATIONAL AERONAUTICS AND SPACE ADMINISTRATION



NASA-CR-128794-Vol-11) RESULTS OF TESTS  
OA12 AND IA9 IN THE AMES RESEARCH CENTER  
UNITARY PLAN WIND TUNNELS ON AN  
0.030-SCALE MODEL OF THE SPACE (Chrysler  
Corp.) 819 p HC \$44.00  
CSCL 22B

N74-17569

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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA Management services

SPACE DIVISION



CHRYSLER  
CORPORATION

October, 1973

DMS-DR-2032  
NASA CR-128,794

VOLUME 11 OF 18

RESULTS OF TESTS OAL2 AND IA9 IN THE  
AMES RESEARCH CENTER UNITARY PLAN WIND TUNNELS  
ON AN 0.030-SCALE MODEL OF THE SPACE SHUTTLE  
VEHICLE 2A TO DETERMINE AERODYNAMIC LOADS

By

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Rockwell International

Prepared under NASA Contract Number NAS9-13247

By

Data Management Services  
Chrysler Corporation Space Division  
New Orleans, Louisiana 70189

for

Engineering Analysis Division

Johnson Space Center  
National Aeronautics and Space Administration  
Houston, Texas

WING TUNNEL TEST SPECIFICS:

Test Numbers:           ARC 11-707 (A)  
                          ARC 97-707 (B)  
                          ARC 87-707 (C)  
NASA Series Numbers:   IA9A, B, C and  
                          OAL2A, C  
Test Date:               2 April - 17 May, 1973

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RESULTS OF TESTS OAL2 AND IA9 IN THE  
AMES RESEARCH CENTER UNITARY PLAN WIND TUNNELS  
ON AN 0.030-SCALE MODEL OF THE SPACE SHUTTLE  
VEHICLE 2A TO DETERMINE AERODYNAMIC LOADS

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R. H. Spangler  
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ABSTRACT

Tests were conducted in the NASA/ARC Unitary Plan Wind Tunnels during April and May 1973, on an 0.030-scale replica of the Space Shuttle Vehicle Configuration 2A. Aerodynamic loads data were obtained at Mach numbers from 0.6 to 3.5.

The investigation included Tests IA9A, B and C on the integrated (launch) configuration and Tests OAL2A and C on the isolated orbit. (entry configuration). The integrated vehicle was tested at angles of attack and sideslip from -8 degrees to +8 degrees. The isolated orbiter was tested at angles of attack from -15 degrees to +40 degrees and angles of sideslip from -10 degrees to +10 degrees as dictated by trajectory considerations. The effects of orbiter/external tank incidence angle and deflected control surfaces on aerodynamic loads were also investigated.



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## INTRODUCTION

The 0.030-scale Aero Loads Space Shuttle model was tested in the Unitary Plan Wind Tunnels at ARC starting April 2, and continuing through May 17, 1973 as follows:

IA9A	11-foot Transonic	April 2 to April 14, 1973
OA12A	11-foot Transonic	April 16 to April 29, 1973
IA9C	8x7-foot Supersonic	April 23 to May 1, 1973
OA12C	8x7-foot Supersonic	May 2 to May 8, 1973
IA9B	9x7-foot Supersonic	May 9 to May 17, 1973

The testing was conducted in all three legs of the Unitary Plan Wind Tunnels to obtain a Mach number range from 0.6 to 3.5. Aerodynamic loads data were obtained for the ascent and entry configurations. The effects of control surface deflections were also investigated.

This report consists of 3 volumes of force data and 15 volumes of pressure data for a total of 18 volumes arranged in the following manner:

<u>VOLUME NO.</u>	<u>CONTENTS</u>
1	IA9A force data
2	IA9B and IA9C force data
3	OA12A and OA12C force data
4	IA9A plotted pressure data
5	IA9B and IA9C plotted pressure data
6	OA12A and OA12C plotted pressure data
7	IA9A tabulated pressure data <ul style="list-style-type: none"> <li>(a) orbiter fuselage</li> <li>(b) orbiter base</li> <li>(c) upper MPS nozzle</li> </ul>
8	IA9A tabulated pressure data <ul style="list-style-type: none"> <li>(a) OMS nozzle</li> <li>(b) body flap</li> <li>(c) OMS pod outside</li> <li>(d) lower wing surface</li> </ul>
9	IA9A tabulated pressure data <ul style="list-style-type: none"> <li>(a) upper wing surface</li> <li>(b) left vertical tail surface</li> <li>(c) right vertical tail surface</li> <li>(d) APU inlet</li> <li>(e) SRM booster base</li> </ul>
10	IA9A tabulated pressure data <ul style="list-style-type: none"> <li>(a) SRM booster</li> <li>(b) external tank</li> <li>(c) external tank base</li> </ul>

## INTRODUCTION (CONTINUED)

- 11 IA9B tabulated pressure data
  - (a) orbiter fuselage
  - (b) orbiter base
  - (c) upper MPS nozzle
  - (d) OMS nozzle
  - (e) body flap
  - (f) OMS pod outside
  - (g) lower wing surface
- 12 IA9B tabulated pressure data
  - (a) upper wing surface
  - (b) left vertical tail surface
  - (c) right vertical tail surface
  - (d) APU inlet
  - (e) SRM booster base
  - (f) SRM booster
  - (g) external tank
  - (h) external tank base
- 13 IA9C tabulated pressure data
  - (a) orbiter fuselage
  - (b) orbiter base
  - (c) upper MPS nozzle
  - (d) OMS nozzle
  - (e) body flap
  - (f) OMS pod outside
- 14 IA9C tabulated pressure data
  - (a) lower wing surface
  - (b) upper wing surface
  - (c) left vertical tail surface
  - (d) right vertical tail surface
- 15 IA9C tabulated pressure data
  - (a) APU inlet
  - (b) SRM booster base
  - (c) SRM booster
  - (d) external tank
  - (e) external tank base
- 16 OAl2A tabulated pressure data
  - (a) orbiter fuselage
  - (b) orbiter base
  - (c) upper MPS nozzle
  - (d) OMS nozzle
  - (e) body flap
  - (f) OMS pod outside

## INTRODUCTION (CONCLUDED)

- 17            OAl2A tabulated pressure data
  - (a) lower wing surface
  - (b) upper wing surface
  - (c) left vertical tail surface
  - (d) right vertical tail surface
  - (e) APU inlet
- 18            OAl2C tabulated pressure data  
             All components

# NOMENCLATURE General

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
a		speed of sound; m/sec, ft/sec
C <sub>p</sub>	CP	pressure coefficient; $(p_1 - p_\infty)/q$
M	MACH	Mach number; $V/a$
p		pressure; N/m <sup>2</sup> , psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$ , N/m <sup>2</sup> , psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
$\alpha$	ALPHA	angle of attack, degrees
$\beta$	BETA	angle of sideslip, degrees
$\psi$	PSI	angle of yaw, degrees
$\phi$	PHI	angle of roll, degrees
$\rho$		mass density; kg/m <sup>3</sup> , slugs/ft <sup>3</sup>

## Reference & C.G. Definitions

A <sub>b</sub>		base area; m <sup>2</sup> , ft <sup>2</sup>
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
$\frac{l}{c}$ <sub>REF</sub>	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m <sup>2</sup> , ft <sup>2</sup>
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

## SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
$\infty$	free stream

# NOMENCLATURE (Continued)

## Body-Axis System

<u>SYMBOL</u>	<u>SADSAC SYMBOL</u>	<u>DEFINITION</u>
$C_N$	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
$C_A$	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
$C_Y$	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
$C_{A_b}$	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$
$C_{A_f}$	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
$C_m$	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
$C_n$	CYN	—yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
$C_l$	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$

## Stability-Axis System

$C_L$	CL	lift coefficient; $\frac{\text{lift}}{qS}$
$C_D$	CD	drag coefficient; $\frac{\text{drag}}{qS}$
$C_{D_b}$	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
$C_{D_f}$	CDF	forebody drag coefficient; $C_D - C_{D_b}$
$C_Y$	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
$C_m$	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS l_{REF}}$
$C_n$	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qS b}$
$C_l$	CSL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qS b}$
$L/D$	L/D	lift-to-drag ratio; $C_L/C_D$
$L/D_f$	L/DF	lift to forebody drag ratio; $C_L/C_{D_f}$

# NOMENCLATURE (CONTINUED)

## ADDITIONS TO STANDARD LIST

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
$\delta_R$	RUDDER	rudder, surface deflection angle, positive deflection, trailing edge to the left; degrees.
$\delta_e$	ELEVON	elevon, surface deflection angle, positive deflection, trailing edge down; degrees.
$\delta_{RF}$	RUDFLR	rudder flare, split rudder deflection angle, left split rudder trailing edge left and right split rudder trailing edge right, $\delta_{RF} = (\delta_{RL} + \delta_{RR})/2$ , positive deflection; degrees.
$i_o$	ORBINC	incidence angle between the orbiter and external tank, $i_o = \alpha_t - \alpha_b$ ; degrees.
$\beta_T$	BETAT	angle of sideslip of external tank.
$\alpha_T$	ALPHAT	angle of attack of external tank.
$l_B$	LB	length of orbiter body; in.
$l_T$	LT	length of external tank; in.
$l_s$	LS	length of SRM booster; in.
$l_{NM}$	LNM	length of OMS nozzle, positive direction forward of exit plane; in.
$l_{NP}$	LNP	length of MPS nozzle, positive direction forward of exit plane; in.
$b/2$	BW	wing semi-span; in.
$b_v$	BV	vertical tail span; in.
$x$	X	distance from component nose; in.
$y$	Y	lateral distance from centerline; in.

# NOMENCLATURE (CONCLUDED)

<u>SYMBOL</u>	<u>PLOT SYMBOL</u>	<u>DEFINITION</u>
$z$	$Z$	vertical distance measured from W.L. 500 (vertical tail reference root chord); in.
$c_w$	$CW$	local wing chord; in.
$c_v$	$CV$	local vertical tail chord; in.
$x/l_B$	$X/LB$	longitudinal position/orbiter body length.
$x/l_T$	$X/LT$	longitudinal position/external tank length.
$x/l_S$	$X/LS$	longitudinal position/booster length.
$x/l_{NM}$	$X/LNM$	longitudinal position/OMS nozzle length.
$x/l_{NP}$	$X/LNP$	longitudinal position/MPS nozzle length.
$x/c_w$	$X/CW$	local chordwise position/local wing chord length.
$x/c_v$	$X/CV$	local chordwise position/local vertical tail chord length.
$y/b/2$	$Y/BW$	local spanwise position/wing semi-span.
$z/b_v$	$Z/BV$	local spanwise position/vertical tail span.

## CONFIGURATIONS INVESTIGATED

The 0.030-scale aero loads model was a replica of the Space Shuttle Vehicle 2A. It consisted of four major components: the orbiter, the external oxygen and hydrogen tank (ET) and two solid rocket boosters (SRB).

On the ascent configuration, the orbiter was strut mounted from the ET on a Task Corporation MK XVI 2.5-inch diameter internal balance. The left SRB was strut mounted from the ET on a Task Corporation MK XXII 1.5-inch diameter internal balance. No attempt was made to simulate actual inter-attachments. The ET was sting mounted to the tunnel model support system on a Task Corporation 4.0-inch diameter internal balance. The right SRB was strut mounted symmetrically to the left side, but did not contain a balance. The orbiter configuration, designated as O2A, consisted of B10C5D7W87V5R5M3F4.

The entry configuration consisted of the isolated orbiter, sting mounted to the tunnel model support system on a Task Corporation MK XXA 2.5-inch diameter internal balance. Midway through the OAL2C test, the MK XXA balance was damaged and was replaced by the MK XXB for the high angles of attack. The orbiter was provided with deflectable elevons by means of interchangeable brackets, deflectable rudder by means of a pin-indexed hinge, and interchangeable rudders to obtain different speed brake flare angles. The main propulsion system engines were removed during entry configuration testing to provide sting clearance. A cover plate was provided for the strut clearance hole.

The orbiter was instrumented with 374 pressure orifices on the left wing, left side of the fuselage, vertical tail, left OMS pod and engine, left and upper MPS engine and the base. The pressures were measured using eleven Scanivalve, Inc., S-type valve modules mounted internally (a five and a six gang unit). When tested in the entry configuration, the MPS pressures were not available for measurement.

The left side of the ET was instrumented with 136 pressure orifices. These pressures were measured by means of 7 Scanivalve, Inc., S-type valve modules configured as one unit of 6 modules and one single. These valves were mounted internally in the tank. The left SRB had one gang of six S-type modules to measure 102 pressures. The right SRB was not instrumented. The pressure transducers used in the valve modules were Statham PM 131 TC differential pressure transducers, with ranges of  $\pm 10$  psid,  $\pm 12.5$  psid and  $\pm 15$  psid. Reference and calibration pressures were measured by the ARC micro manometers.

Some modifications were made to the model at the test site prior to



# CONFIGURATIONS INVESTIGATED (CONTINUED)

testing. These were as follows:

1. The forward tip of the ET containing the retro rocket package (Reference NR Drawing VL78-000018) was replaced with a flush 0.90 inch radius nose (Model scale). The new nose had five pressure taps; one in the nose and four more aft of the nose on the vertical and horizontal axis on a 0.315 inch radius.
2. The ET balance cavity was enlarged by one inch on the diameter (from 5 inches to 6 inches) to provide clearance for cable routing and eliminate balance interference.
3. The clearances around both the orbiter and the SRB struts were opened to approximately 1/8 inch to prevent interference.
4. An alternate rudder hinge pin was provided to give a rudder deflection of +15 degrees.

Before and during the tests various model discrepancies developed or were discovered. These were generally minor and had only a negligible, if any, effect on the data. Significant discrepancies are noted below:

1. Pressure orifices P171 and P173 on the OMS pod base were omitted.....
2. During the test certain pressure taps developed leaks or became plugged. Data from these taps are questionable and should be used with caution. Difficulties in checking may have resulted in erroneous indications of leakage. Repairs were made to correct leaking or plugged pressure instrumentation, whenever possible, as the test progressed. The following list gives those taps that were indicated as bad on the various leak and response checks:

ARC Facility	Run Nos.	Orifice numbers with questionable pressure data
11'	2-4	72, 163, 427
↓	5-118	31, 100, 123, 163, 201, 427
	119-160	16, 98, 101, 107, 333, 427
	161-170	16, 98, 101, 107, 333, 427 + 306, 307, 327, 328, 336, 337, 356, 357, 375

# CONFIGURATIONS INVESTIGATED (CONCLUDED)

<u>ARC Facility.</u>	<u>Run Nos.</u>	<u>Orifice numbers with questionable pressure data</u>
11'	171-182	16, 47, 53, 75, 78, 98, 107, 201, 236, 237, 238, 307, 327, 365, 427
↓	183-189	Same as (171-182) + 7, 447, 525
↓	190-211	Same as (171-182)
8'x7'	220-234	20, 21, 24, 74, 326, 327, 336, 424, 427, 752, 868, 871
↓	235-285	74, 326, 327, 336, 424, 427, 752, 868, 871
↓	286-300	74, 107, 115, 124, 129, 138, 326, 327, 336, 427
↓	301-305	74, 326, 327, 336, 427
↓	306-333	74, 326, 327, 427
9'x7'	340-396	5, 325, 326, 327, 424, 427, 526, 752, 868, 871

## TEST FACILITIES DESCRIPTION

### Ames 11 x 11-Ft. Transonic

The Ames 11 x 11-Foot Transonic Wind Tunnel is a variable density, closed return, continuous flow type. This tunnel has an adjustable nozzle (two flexible walls) and a slotted test section to permit transonic testing over a Mach number range continuously variable from 0.4 to 1.4.

### Ames 8 x 7-Ft. Supersonic

The Ames 8 x 7-Foot Supersonic Wind Tunnel is a closed-return, variable-density tunnel with a 8- by 7-foot rectangular test section. The nozzle has flexible side walls with fixed upper and lower surfaces. Mach number range is continuously variable from 2.45 to 3.5. Tunnel stagnation pressure can be varied from 0.3 to 2.0 atmospheres and Reynolds number per foot varies from  $1.0 \times 10^6$  to  $5.0 \times 10^6$ .

### Ames 9 x 7-Ft. Supersonic

The Ames 9 x 7-Foot Supersonic Wind Tunnel is a variable density, continuous flow type with an adjustable nozzle to permit supersonic testing over a Mach number range continuously variable from 1.5 to 2.5. The nozzle is of the asymmetric, sliding-block type in which the variation of the test section Mach number is achieved by translating, in the streamwise direction, the fixed-contour block that forms the floor of the nozzle.

## DATA REDUCTION

Standard procedures were utilized to reduce force and pressure data to coefficient form. The following dimensional constants were applied:

### Reference Dimensions and Constants (Model Scale)

$$S_{\text{Ref.}} = 2.421 \text{ ft}^2$$

Orbiter reference area

$$Q_{\text{Ref.}} = 39.849 \text{ in.}$$

Orbiter reference length

### Base Areas (Model Scale)

$$A_{\text{BOI}} = 0.1903 \text{ Ft}^2$$

Orbiter base area, integrated

$$A_{\text{BOA}} = 0.2362$$

Orbiter base area, sting mounted

$$A_{\text{BMPSU}} = 0.0417$$

Orbiter upper MPS base area

$$A_{\text{BMPSL}} = 0.0853$$

Orbiter lower MPS base area

$$A_{\text{BACPS}} = 0.0310$$

Orbiter ACPS base area on OMS pod

$$A_{\text{BOMS}} = 0.0231$$

Orbiter OMS nozzle base area

$$A_{\text{BPOD}} = 0.0257$$

Orbiter OMS pod base area

$$A_{\text{CO}} = 0.0611$$

Orbiter sting cavity base area

$$A_{\text{BNOZ}} = 0.0564$$

SRM nozzle base area

$$A_{\text{BSKIRT}} = 0.1729$$

SRM nozzle skirt base area

$$A_{\text{BETI}} = 0.3189$$

ET Base area

$$A_{\text{CET}} = 0.1964$$

ET Sting cavity base area

TEST : 0A12 / 1A9		TABLE I.	DATE : May, 1973	
TEST CONDITIONS				
MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. foot)	STAGNATION TEMPERATURE (degrees Fahrenheit)	
0.6	$4.0 \times 10^6$	540	120° NOM.	
0.9	4.5	800		
1.1	4.0	800		
1.25	3.0	630		
1.4	3.0	650		
1.55	2.8	600		
2.0	2.3	490		
2.5	1.5	300		
3.0	2.0	350		Y
3.5	2.0	300		

FIVE (5) TASK CORPORATION BALANCES  
BALANCE UTILIZED: WITH CAPACITIES AS FOLLOWS:

	ISOLATED ORBITER		INTEGRATED VEHICLE		
	MARK IIA	MARK IB	ORG MARK III	SRB MARK IX	ET MARK IIB
NF	3000	3000	2400	1250	4000
NA	3000	3000	2400	1250	4000
YF	1500	1500	1200	500	2000
YA	1500	1500	1200	500	2000
X	600	600	1500	200	1000
R	4000	4000	4000	1000	10,000
SIZE	2.5"	2.5"	2.5"	1.5"	4.0"

COMMENTS: THE MARK IIA, 2.5IN DIA. BALANCE WAS  
DAMAGED AFTER RUN 319. THE MARK IB WAS  
SUBSTITUTED FOR RUN 320 AND SUBSEQUENT RUNS

TABLE II.

DATE: 4-27-75										DATE: 4-27-75									
DATA SET/RUN NUMBER COLLATION SUMMARY										DATA SET/RUN NUMBER COLLATION SUMMARY									
TEST: ARC 11-707(1A9A)										TEST: ARC 11-707(1A9A)									
DATA SET IDENTIFIER										DATA SET IDENTIFIER									
CONFIGURATION										CONFIGURATION									
SCHD. PARAMETERS/VALUES										SCHD. PARAMETERS/VALUES									
NO. OF RUNS										NO. OF RUNS									
MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)										MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)									
TEST RUN NUMBERS										TEST RUN NUMBERS									
75 76										75 76									
67										67									
61										61									
55										55									
49										49									
43										43									
37										37									
31										31									
25										25									
19										19									
13										13									
7										7									
1										1									
NDV										NDV									
IDVAR (2)										IDVAR (2)									
IDVAR (1)										IDVAR (1)									
PC = -0.4, 0, 4, 8										PC = -0.4, 0, 4, 8									
COEFFICIENTS										COEFFICIENTS									
αA = -8, -6, -4, -2, 0, 2, 4, 6, 8										αA = -8, -6, -4, -2, 0, 2, 4, 6, 8									
αB = -8, -6, -4, -2, 0, 2, 4, 6, 8										αB = -8, -6, -4, -2, 0, 2, 4, 6, 8									
α OR β										α OR β									
SCHEDULES										SCHEDULES									

TABLE II. CONTINUED

DATE: 4-5-59

## DATA SET/RUN NUMBER COLLATION SUMMARY

TEST: ARC-11-707(IA99)

DATA SET IDENTIFIER	CONFIGURATION	SCHD. PARAMETERS/VALUES						NO. OF RUNS	MACH NUMBERS ( OR ALTERNATE INDEPENDENT VARIABLE )					TEST RUN NUMBERS		
		$\alpha$		$\beta$		$\delta$			$\epsilon$	$\zeta$	0.6	0.9	1.1		1.25	
		$\alpha$	$\beta$	$\delta_e$	$\delta_r$	$\delta_{fr}$	$\zeta_0$									
RBMx19	$\phi_{em} + S_3 + T_7$	6	C	0	-5	0	0.5	2								
20		8	T	T	-5	T	T	T			115	114				
21		-8			-10						101	106				
22		-6			T						60	69				
23		-4									61	70				
24		-2									62	71				
25		0									63	72				
26		2									64	73				
27		4									65	74				
28		6									66	75				
29		8									67	76				
30		-8			-15						68	77				
31		-6			T						78	88				
32		-4									79	89				
33		-2									80	90				
34		0									81	91				
35		2									82	92				
36		4									83	93				
											84	94				
1	7	13	19	25	31	37	43	49	55	61	67	73	79	85		
COEFFICIENTS														IDVAR (1)	IDVAR (2)	NDV
$\alpha$ OR $\beta$														SCHEDULES		

TABLE II. CONTINUED

TEST : ARC 11-707 (IAP)										DATA SET/RUN NUMBER COLLATION SUMMARY										DATE :									
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES					NO. OF RUNS	MACH NUMBERS ( OR ALTERNATE INDEPENDENT VARIABLE )																			
		$\alpha$	$\beta$	$\delta_e$	$\delta_R$	$\delta_{FR}$	$L_o$	0.6		0.9	1.1	1.25																	
RBMx 37	$\phi_{2A} + S_2 + T_2$	6	C	0	-15	0	0.5	2				85	95																
38		8	T		-15		T	T				87	96																
39		-8			-5							50	55																
40		-1			T							51	56																
41		0										52	57																
42		4										53	58																
43		8	V				V	V				54	59																
44		A	O		0		-1.2	4	107	108	109	110																	



TABLE II. CONTINUED

TEST: ARC 97-707(IA99B)

DATE: 5-17-73

DATA SET/RUN NUMBER COLLATION SUMMARY

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS ( OR ALTERNATE INDEPENDENT VARIABLE )																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															</
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TABLE II. CONTINUED

DATE: 5-17-73

## DATA SET/RUN NUMBER COLLATION SUMMARY

TEST: 10C 97-707 (IA98)

DATA SET IDENTIFIER		CONFIGURATION	SCHD.				PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS ( OR ALTERNATE INDEPENDENT VARIABLE )										TEST RUN NUMBERS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
			$\alpha$	$\beta$	$\delta e$	$\delta R$	$\delta o$	$\delta P$	1.55	2.0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

TABLE II. CONTINUED

[illegible]

TABLE II. CONTINUED

DATE: 5-1-73

## DATA SET/PIIN NUMBER COLLATION SUMMARY

TEST: ARC 8x7-707 (IAGC)

MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)										TEST RUN NUMBERS															
DATA SET IDENTIFIER		CONFIGURATION		SCHD.					PARAMETERS/VALUES					NO. OF RUNS											
				$\alpha$ $\beta$		$\delta e$	$\delta R$	$\delta_{SR}$	$\delta_0$																
RBNx17		$\theta_{2A} + S_3 + T_9$		-8 C		0	-10	0	0.5	3															
18				-4 T		T	T	T	T	T															
19				0		T	T	T	T	T															
20				4		T	T	T	T	T															
21				6		T	T	T	T	T															
22				8		T	T	T	T	T															
				</																					

TABLE II. CONTINUED

TEST: LINES 11-707 (OAL2A)										DATE 4-23-73																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
DATA SET/RUN NUMBER COLLATION SUMMARY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
DATA SET IDENTIFIER	CONFIGURATION	SCHD. PARAMETERS/VALUES					NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)					TEST RUN NUMBERS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
		$\alpha$	$\beta$	$\delta_e$	$\delta_R$	$\delta_{FR}$		0.6	0.9																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
RBPX01	B <sub>0</sub> C <sub>5</sub> D <sub>7</sub> N <sub>2</sub> E <sub>4</sub> M <sub>3</sub> N <sub>6</sub> V <sub>5</sub> R <sub>3</sub> W <sub>6</sub> E <sub>10</sub>	A	0	0	0	0	2	119	125																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

TABLE II. CONTINUED

DATE: 4-23-73

## DATA SET/RIN NUMBER COLLATION SUMMARY

TEST: AMES 11-707 (0A12A)

DATA SET IDENTIFIER	CONFIGURATION	SCHD.			PARAMETERS/VALUES			NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)		
		$\alpha$	$\beta$	$\delta$	$\delta e$	$\delta R$	$\delta FR$		0.6	0.9	
RBPR19	$B_{10}C_5D_1N_2E_4M_3N_6V_5R_5W_8T_1E_{10}$	10	D	+10	0	0	0	2	153	157	
20		15	T	T	T	T	T	T	154	159	
21		20	T	T	T	T	T	T	155	158	
22		0	C	-10					161	166	
23		5	T	T	T	T	T	T	162	167	
24		10	T	T	T	T	T	T	163	168	
25		15	T	T	T	T	T	T	164	169	
26		20	T	T	T	T	T	T	165	170	
27		-4	E	-20					171	182	
28		0	C						172	181	
29		5	T	T	T	T	T	T	173	180	
30		10	T	T	T	T	T	T	174	179	
31		15	T	T	T	T	T	T	175	178	
32		20	T	T	T	T	T	T	176	177	
33		-4	E	0	0	40			183	189	
34		0	C	T	T	T	T	T	184	190	
35		5	T	T	T	T	T	T	185	191	
36		10	T	T	T	T	T	T	186	192	

TEST RUN NUMBERS

75 76 67 61 55 49 43 37 31 25 19 13 7

COEFFICIENTS

$\alpha A = -MAX, 0, 5, 10, 15, 20, 25$

$\beta B = -10, -5, 5, 10$

NDV

IDVAR (1) IDVAR (2)

$\beta C = -8, -4, 0, 4, 8$

$\beta D = -10, 0, 10$

$\beta E = -5, 0, 5$

$\alpha$  OR  $\beta$

SCHEDULES

75 76 67 61 55 49 43 37 31 25 19 13 7

TABLE II. CONTINUED

TEST : AMES 11-707 (QA12A)		DATA SET/RUN NUMBER COLLATION SUMMARY										DATE : 4-23-73		
DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS ( OR ALTERNATE INDEPENDENT VARIABLE )					TEST RUN NUMBERS
		$\alpha$	$\beta$	$\delta_e$	$\delta_R$	$\delta_{FR}$	0.6		0.9	1.1	1.25	1.4		
RBPx37	B <sub>0</sub> G <sub>0</sub> N <sub>0</sub> F <sub>0</sub> M <sub>0</sub> V <sub>0</sub> R <sub>0</sub> W <sub>0</sub> F <sub>0</sub>	15	C	0	0	0	40		187	193				
38		20	C				40		188	194				
39		F	0				0							
40		0.5	G											
41		-4	E								199	197	195	
42		-4	E								200	198	196	
43		-4	E	10	0	0			201	202				
44		-4	E	-10					203	204				
45		-4	E	0					205	206				
46		-4	E	0					207	208				
47		H	0						210	209				
48		-5	I						216	211				
		-10	I						215	212				
									214	213				

TABLE II. CONTINUED

DATE: 5-9-73

## DATA SET/RUN NUMBER COLLATION SUMMARY

TEST: 87-707 (0A12C)

DATA SET IDENTIFIER	CONFIGURATION	SCHD.		PARAMETERS/VALUES				NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE)										TEST RUN NUMBERS									
		$\alpha$	$\beta$	$\delta C$	$\delta R$	$\delta F$	$\delta FR$		2.5	3.5																		
PBQ01	B10C-G-N-E-M-N-V-R-W-F	A	0	0	0	0	40	2	290	286																		
02		0	B	T	T	T	T	1	293	289																		
03		10	C	T	T	T	T		292	288																		
04		10	C	T	T	T	T		291	287																		
05		0	D	T	T	T	T		297	294																		
06		10	T	T	T	T	T		298	295																		
07		20	T	T	T	T	T		299	296																		
08		0	T	T	T	T	T		303	300																		
09		10	T	T	T	T	T		304	301																		
10		20	T	T	T	T	T		305	302																		
11		0	T	T	T	T	T		309	306																		
12		10	T	T	T	T	T		310	307																		
13		20	T	T	T	T	T		311	305																		
14		0	T	T	T	T	T		317	314																		
15		10	T	T	T	T	T		318	315																		
16		20	T	T	T	T	T		319	316																		
17		E	0	0	0	0	0	1	322	320																		
18		30	D	0	0	0	0	1	323	321																		

COEFFICIENTS

 $\alpha A = 0, 5, 10, 15, 20$  $\beta B = 3, -3$  $\alpha E = 15, 20, 25, 30, 35, 40$  $\beta C = 6, 3, -3, -6$  $\beta D = 6, 3, 0, -3, -6$ 

IDVAR (1) IDVAR (2) NDV

75 76

67

61

55

49

43

37

31

25

19

13

7



**DATE: 5-9-73**

32

TABLE III. MODEL COMPONENT DIMENSIONAL DATA

MODEL COMPONENT: B10 Body

GENERAL DESCRIPTION: Fuselage, 2A Configuration, Lightweight Orbiter, per  
Rockwell Lines VL70-000089 "B."

Scale Model = .030

DRAWING NUMBER:

VL70-000089 "B"  
VL70-000092, 93, 94 "A"

DIMENSIONS:

	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length ~ IN	<u>1328.3</u>	<u>39.8490</u>
Max. Width ~ IN (@X <sub>0</sub> = 1528.3)	<u>265.0</u>	<u>7.9500</u>
Max. Depth ~ IN. (@X <sub>0</sub> = 1480.52)	<u>248.0</u>	<u>7.4400</u>
Fineness Ratio	<u>5.012</u>	<u>5.012</u>
Area ~ Ft <sup>2</sup>		
Max. Cross-Sectional	<u>456.4</u>	<u>.41076</u>
Planform		
Wetted		
Base		

TABLE III. (CONTINUED)

MODEL COMPONENT: Canopy - C5

GENERAL DESCRIPTION: 2A Configuration per Lines VL70-000092

Scale Model = .030

DRAWING NUMBER: VL70-000092

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length (STA FWD Bulkhead)	<u>391.0</u>	<u>11.730</u>
Max. Width (T.E. Bulkhead)	<u>560.0</u>	<u>16.800</u>
Max. Depth (WP = 42.9 22 to = 500)	<u>          </u>	<u>          </u>
Fineness Ratio	<u>          </u>	<u>          </u>
Area	<u>          </u>	<u>          </u>
Max. Cross-Sectional	<u>          </u>	<u>          </u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

TABLE III. (CONTINUED)

MODEL COMPONENT: Manipulator Housing D-7

GENERAL DESCRIPTION: 2A Configuration per Rockwell Lines VL70-000093

Scale Model = .030

DRAWING NUMBER: VL70-000093

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length ~ IN.	881.00	26.430
Max. Width ~ IN.	51.00	1.530
Max. Depth ~ IN.	23.00	.690
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		
E Fuselage	BP = 0.00	
	WP = 500.0 IN. FS	
	X.426.0 to 1307.0 IN. FS	

TABLE III. (CONTINUED)

MODEL COMPONENT: WING-W87 New Light Weight OrbiterGENERAL DESCRIPTION: Orbiter Configuration Per Lines VL70-000093.

NOTE: (Dihedral Angle is defined at the lower surface of the Wing at the 75.33% element line projected into a plane perpendiculary.

Scale Model = .030TEST NO.DWG. NO. VL70-000093DIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATAArea (Theo.)  $\text{Ft}^2$ 

Planform

2690.002.42100

Span (Theo) In.

936.6828.10040

Aspect Ratio

2.2652.265

Rate of Taper

1.1771.177

Taper Ratio

0.2000.2000

Dihedral Angle, degrees

3.50003.500

Incidence Angle, degrees

3.000+3.00

Aerodynamic Twist, degrees

3.500+3.000

Sweep Back Angles, degrees

Leading Edge

45.0045.00

Trailing Edge

-10.24-10.24

0.25 Element Line

35.20935.209

Chords:

Root (Theo) B.P.O.O.

689.2420.67720

Tip, (Theo) B.P. 46834

137.854.13550

MAC

474.8114.24430

Fus. Sta. of .25 MAC

1136.8934.10670

W.P. of .25 MAC

299.208.97840

B.L. of .25 MAC

182.135.46390

193.13

EXPOSED DATAArea (Theo)  $\text{Ft}^2$ 1752.291.57706

Span, (Theo) In. BP108 to 468.341

720.6821.62040

Aspect Ratio

2.0582.058

Taper Ratio

.2451.2451

Chords

Root BP108

562.4016.8720Tip 1.00  $\frac{b}{2}$ 137.854.13550

MAC

393.0311.79090

Fus. Sta. of .25 MAC

1185.3135.55930

W.P. of .25 MAC

300.2079.00621

B.L. of .25 MAC

143.764.31280

Airfoil Section (Rockwell Mod NASA)

XXXX-64

Root  $\frac{b}{2}$  = .425.10.10Tip  $\frac{b}{2}$  = 1.00.12.12

Data for (1) of (2) Sides

Leading Edge Cuff  $\text{Ft}^2$ 120.33.10830Planform Area  $\text{Ft}^2$ 560.016.80

Leading Edge Intersects Fus M. L. @ Sta

1035.031.050

Leading Edge Intersects Wing @ Sta

TABLE III. (CONTINUED)

MODEL COMPONENT: Elevon E-18GENERAL DESCRIPTION: 2A Configuration Per W-87 Rockwell Lines VL 70-000093Data for (1) of (2) SidesScale Model = .030DRAWING NUMBER:VL 70-000093DIMENSIONS:FULL-SCALEMODEL SCALEArea ~ Ft<sup>2</sup>205.52.18497

Span (equivalent) ~ IN.

353.3410.60020

Inb'd equivalent chord

114.783.44340

Outb'd equivalent chord

55.001.6500Ratio movable surface chord/  
total surface chord.

At Inb'd equiv. chord

.208.208

At Outb'd equiv. chord

.400.400

Sweep Back Angles, degrees

Leading Edge

0.000.00

Tailing Edge

-10.24-10.24

Hingeline

0.000.00Area Moment (Normal to hinge line) Ft<sup>3</sup>1548.07.04180

Product of Area Moment

TABLE III. (CONTINUED)

MODEL COMPONENT: VERTICAL - V5 (Light Weight Orbiter Configuration)GENERAL DESCRIPTION: Centerline Vertical Tail, Double Wedge Airfoil with Rounded Leading Edge

Scale Model = .030

DRAWING NUMBER:

VL70-000095DIMENSIONS:FULL-SCALEMODEL SCALETOTAL DATA

Area (Theo) $\text{Ft}^2$	<u>413.25</u>	<u>.37192</u>
Planform		
Span (Theo) In	<u>315.72</u>	<u>9.47160</u>
Aspect Ratio	<u>1.675</u>	<u>1.675</u>
Rate of Taper	<u>0.507</u>	<u>0.507</u>
Taper Ratio	<u>.404</u>	<u>.404</u>
Sweep Back Angles, degrees		
Leading Edge	<u>45.000</u>	<u>45.000</u>
Trailing Edge	<u>26.249</u>	<u>26.249</u>
0.25 Element Line	<u>41.130</u>	<u>41.130</u>
Chords:		
Root (Theo) WP	<u>268.50</u>	<u>8.05500</u>
Tip (Theo) WP	<u>108.47</u>	<u>3.25410</u>
MAC	<u>199.81</u>	<u>5.99430</u>
Fus. Sta. of .25 MAC	<u>1463.50</u>	<u>43.90500</u>
W. P. of .25 MAC	<u>635.522</u>	<u>19.06566</u>
B. L. of .25 MAC	<u>0.00</u>	<u>0.00</u>
Airfoil Section		
Wedge Angle Deg	<u>10.000</u>	<u>10.000</u>
Wedge Angle Deg	<u>14.920</u>	<u>14.920</u>
Leading Edge Radius IN.	<u>2.00</u>	<u>.06</u>
Void Area $\text{Ft}^2$	<u>13.17</u>	<u>.01185</u>
Blanketed Area $\text{Ft}^2$	<u>12.67</u>	<u>.01140</u>

TABLE III. (CONTINUED)

MODEL COMPONENT: R-5 Rudder

GENERAL DESCRIPTION: ZA Configuration per Rockwell Lines VL 70-000095

Scale Model = .030

DRAWING NUMBER: VL 70-000095

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Area ~ Ft <sup>2</sup>	<u>106.38</u>	<u>.09574</u>
Span (equivalent) ~ IN.	<u>201.0</u>	<u>6.030</u>
Inb'd equivalent chord	<u>91.585</u>	<u>2.74755</u>
Outb'd equivalent chord	<u>50.833</u>	<u>1.52499</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>34.83</u>	<u>34.83</u>
Tailing Edge	<u>26.25</u>	<u>26.25</u>
Hingeline	<u>34.83</u>	<u>34.83</u>
Area Moment (Normal to hinge line) ~ Ft <sup>3</sup>	<u>526.13</u>	<u>.01421</u>
Product of Area and Mean Chord		



TABLE III.. (CONTINUED)

MODEL COMPONENT: OMS Pod M3GENERAL DESCRIPTION: 2A Light Weight Configuration per Rockwell LinesVL70-000094AScale Model = .030DRAWING NUMBER: VL70-000094ADIMENSIONS:FULL-SCALEMODEL SCALE

Length

346.010.380Max. Width  $X_1 = 1450.0$ 108.03.240Max. Depth  $X_0 = 1500.0$ 113.03.390

Fineness Ratio

Area

Max. Cross-Sectional

Planform

Wetted

Base

L of OMS Pod

WP = 463.9 IN. FS      WP 400 + 63.9 = 463.9

BP = 80.0 IN. FS

Length 1214.0 to 1560.0' = 346.0 IN. FS

TABLE III. (CONTINUED)

MODEL COMPONENT: FL Body FlapGENERAL DESCRIPTION: 2A Configuration per Rockwell Lines VL70-000094AScale Model = .030DRAWING NUMBER: VL70-000094A

<u>DIMENSIONS:</u>	<u>FULL-SCALE</u>	<u>MODEL SCALE</u>
Length	<u>84.70</u>	<u>2.541</u>
Max. Width	<u>265.00</u>	<u>7.950</u>
Max. Depth	<u>          </u>	<u>          </u>
Fineness Ratio	<u>          </u>	<u>          </u>
Area ~ Ft <sup>2</sup>	<u>          </u>	<u>          </u>
Max. Cross-Sectional —	<u>          </u>	<u>          </u>
Planform	<u>142.64</u>	<u>.12838</u>
Wetted	<u>          </u>	<u>          </u>
Base Ft <sup>2</sup>	<u>38.65</u>	<u>.03478</u>

TABLE III. (CONTINUED)  
MODEL DIMENSIONAL DATA

MODEL COMPONENT : S3-Booster Solid Rocket Motor  
GENERAL DESCRIPTION : 2A Configuration Per Rockwell Lines VL77-000012  
& VL72-000061 "B"  
Body of Revolution; Data for (1) of (2) Sides  
Scale Model = .030  
DRAWING NUMBER : VL 77-000012

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length -IN.	<u>1732.0</u>	<u>51.96</u>
Max Width (DIA) IN. BSRM Tank	<u>142.0</u>	<u>4.260</u>
Max Depth (DIA) Aft Skirt	<u>259.0</u>	<u>7.77</u>
Fineness Ratio L/D	<u>6.687</u>	<u>6.687</u>
Area ~ Ft <sup>2</sup>	<u>          </u>	<u>          </u>
Max. Cross-Sectional (Aft Skirt)	<u>365.87</u>	<u>.32928</u>
Planform	<u>          </u>	<u>          </u>
Wetted	<u>          </u>	<u>          </u>
Base	<u>          </u>	<u>          </u>

Ref.

FS (Orbiter) = 0.00 = 747.99 IN. ET = 200.0 IN. BSRM  
WP (BSRM) = WP 400(Orbiter) - 344.413 = 55.587 IN.  
BP (Orbiter) = 0.00 = 243.0 IN. BSRM

TABLE III. (CONCLUDED)

MODEL COMPONENT: EXTERNAL TANK - T9

GENERAL DESCRIPTION: 2A Configuration

NOTE: T9 identical to T8 W/O retro pkg., nose w/30"R F.S.

DRAWING NUMBER

NONE

DIMENSION:

FULL SCALE

MODEL SCALE

Length - IN.

1858

55.740

Max Width (Dia) - IN.

324.0

9.720

Max Depth

Fineness Ratio L/D

5.73457

5.73457

Area - FT<sup>2</sup>

Max Cross-Sectional

572.56

0.51530

Planform

Wetted

Base

Nose, Radius, IN.

30.0

# ORBITER BODY

ORBITER STATION ~ X <sub>0</sub>		RADIAL LOCATION θ ~ DEGREES																		
FULL	MODEL	X <sub>0</sub> /A	0	20	40	55	70	90	105	110	120	135	142	150	157	162	165	169	172	180
200	6.00	0	20					22			30			31						23
210	6.30	.008	21				28	29			39			40						32
225	6.75	.019	24	25	26	27	37	38			48			49						41
245	7.35	.034	33	34	35	36	46	47			57			58					60	59
280	8.40	.060	42	43	44	45	55	56							61					72
360	11.40	.136	51	52	53	54					68			69		70		71		
400	12.00	.151						67					73							83
410	12.30	.158	62	63	64	65	66				80			81			82			91
430	12.90	.173					78	79			88			89			90			99
460	13.80	.196				77	86	87			96			97			98			107
500	15.00	.226	74	75	76		94	95			104			105			106			115
560	16.80	.271	84		85		102	103			112			113			114			
625	18.75	.320	92	92	93		110	111						122			123			124
725	21.75	.395	100	100	101						121			128						129
880	26.40	.512	108	108	109		119	120			127			136			137			138
980	29.40	.587	116		117		125	126			134			145			146			
1080	32.40	.662			118		131	132			143			153			154			
1120	35.40	.738			150		140	141		133				161			162			
1245	37.35	.787			139		148	149		142				169			170			
1300	39.00	.828			147		156	157		150										
1375	41.25	.885			155		164	165		158										
1430	42.90	.926								166										
1480	44.40	.964	163								171									
1530 <sup>a</sup>	45.90	1.001									172									
1530 <sup>b</sup>	45.90	1.001																		

a OMS POD, INSIDE

b OMS POD, OUTSIDE

a, Orbiter body  
Table IV. Pressure Orifice Locations

# ORBITER BASE

LOCATION	ORIFICE NUMBERS
ORBITER BASE (INTEGRATED)	1, 2, 3, 4
LEFT MPS NOZZLE BASE	5
UPPER MPS NOZZLE BASE	6
ACPS BASE AREA ON OMS POD	7
OMS NOZZLE BASE	8
OMS POD BASE	9
ORBITER BASE (STING MOUNT)	11, 12, 13, 14
ORBITER STING CAVITY	15, 16

## BODY FLAP LWR SURFACE

ORB. STA. ~ X <sub>0</sub>	$\theta \sim \text{DEG}$	
FULL MODEL	0	40
1580	47.40	175 176

## MPS NOZZLE

$X \sim \text{IN.}$		$\theta \sim \text{DEG}$					
FULL	MODEL	0	90	135	180	225	270
25	0.75	181	182	183	184	185	186
50	1.50	187	188	189	190	191	192
75	2.25		193	194	195	196	197

## OMS NOZZLE

$X \sim \text{IN.}$		$\theta \sim \text{DEG}$		
FULL	MODEL	135	180	225
10	0.30	177	178	179
20	0.60		180	

## VERTICAL TAIL

WATER PLATE $\sim Z_0$		$X/C \sim \text{THEORETICAL VERTICAL CHORD}$									
FULL	MODEL	7v	0	.05	.15	.30	.52	.65	.775	.90	
525	15.75	.079	400								
550	16.50	.158	L R	411 511	412 512	413 513	414 514	415 515	416 516		
600	18.00	.316	L R	421 521	422 522	423 523	424 524	425 525	426 526	427 527	
690	20.70	.60	L R	431 531	432 532	433 533	434 534	435 535	436 536	437 537	
765	22.95	.84	L R	441 541	442 542	443 543	444 544	445 545	446 546	447 547	
792	23.76	.925	L R	451 551	452 552	453 553	454 554	455 555	456 556	457 557	

b. Orbiter Base, Body Flap Lower Surface, and Vertical Tail

Table IV. Continued.

ORBITER WING

ORBITER B.P. - $\gamma$		X/C - THEORETICAL WING CHORD																				
FULL MODEL	$\gamma$	-.49	-.35	-.25	-.15	-.033	0.0	.05	.15	.25	.40	.55	.60	.65	.70	.725	.75	.775	.80	.85	.90	.95
140	.299	U	200	201	202			203		204		205					206		207	208		209
		L	301	302	302			303		304		305					306		307	308		309
170	.364	U			211			212														
		L		210	311			312														
200	.427	U				220		221	222		223	224					225		226	227	228	229
		L						321	322		323	324					325		326	327	328	329
240	.534	U					230	231	232	233	234	235				236		237		238	239	240
		L						338	339	340	341	342				343		344		345	346	347
315	.673	U					250	251	252	253	254	255			256			257		258	259	260
		L						351	352	353	354	355			356			357		358	359	360
365	.750	U					260	261	262	263				264			265			266	267	268
		L						361	362	363				364			365			366	367	368
415	.887	U					270	271	272	273	274						276				277	278
		L						371	372	373	374						376				377	378

U - UPPER SURFACE L - LOWER SURFACE

$\gamma$	X/C LOCAL WING CHORD
.299	0, .094, .229, .362, .497, .700, .834, .865, .900, .965
.364	0, .086, .246
.427	0, .081, .177, .402, .565, .760, .805, .857, .905, .953
.534	SAME AS THEORETICAL CHORD
.673	
.750	
.887	

c. Orbiter Wing  
Table IV. Continued.

EXTERNAL TANK

TANK STA ~ XT			$\theta \sim \text{DEG}$									
FULL	MODEL	XT/IT	0	30	60	90	120	135	150	165	180	270
316.	9.48	0	610			614					619	620
317.7	9.53	.001	611			624					629	
400	12.00	.045	621	622	623	634	625		627	638	639	
520	15.60	.110	631	632	633	644	635		637	646	649	
640	19.20	.174	641	642	643	654	645		647	658	659	
670	20.10	.191	651	652	653	664	655		657	668	669	
710	21.30	.212	661	662	663	674	665	676	667	678	679	
750	22.50	.234	671	672	673	684	675		677	688	689	
850	25.50	.287	681	682	683	694	685	696	687	698	699	
950	28.50	.341	691	692	693	704	695		697	708	709	
1050	31.50	.395	701	702	703	714	705	716	707		719	
1150	34.50	.449	711	712	713	724	715		717	728	729	
1250	37.50	.503	721	722	723	734	725	736	727		739	
1350	40.50	.557	731	732	733	744	735		737	748	749	
1500	45.00	.637	741	742	743		745		747		759	
1700	51.00	.745	751	752	753		755	756	757	768		
1900	57.00	.853	761	762	763		765	766	767	778		
2040	61.20	.929	771	772	773	774	775	776	777			
STING CAVITY			601			603					604	
BASE			602									

d. External Tank  
Table IV. Continued.

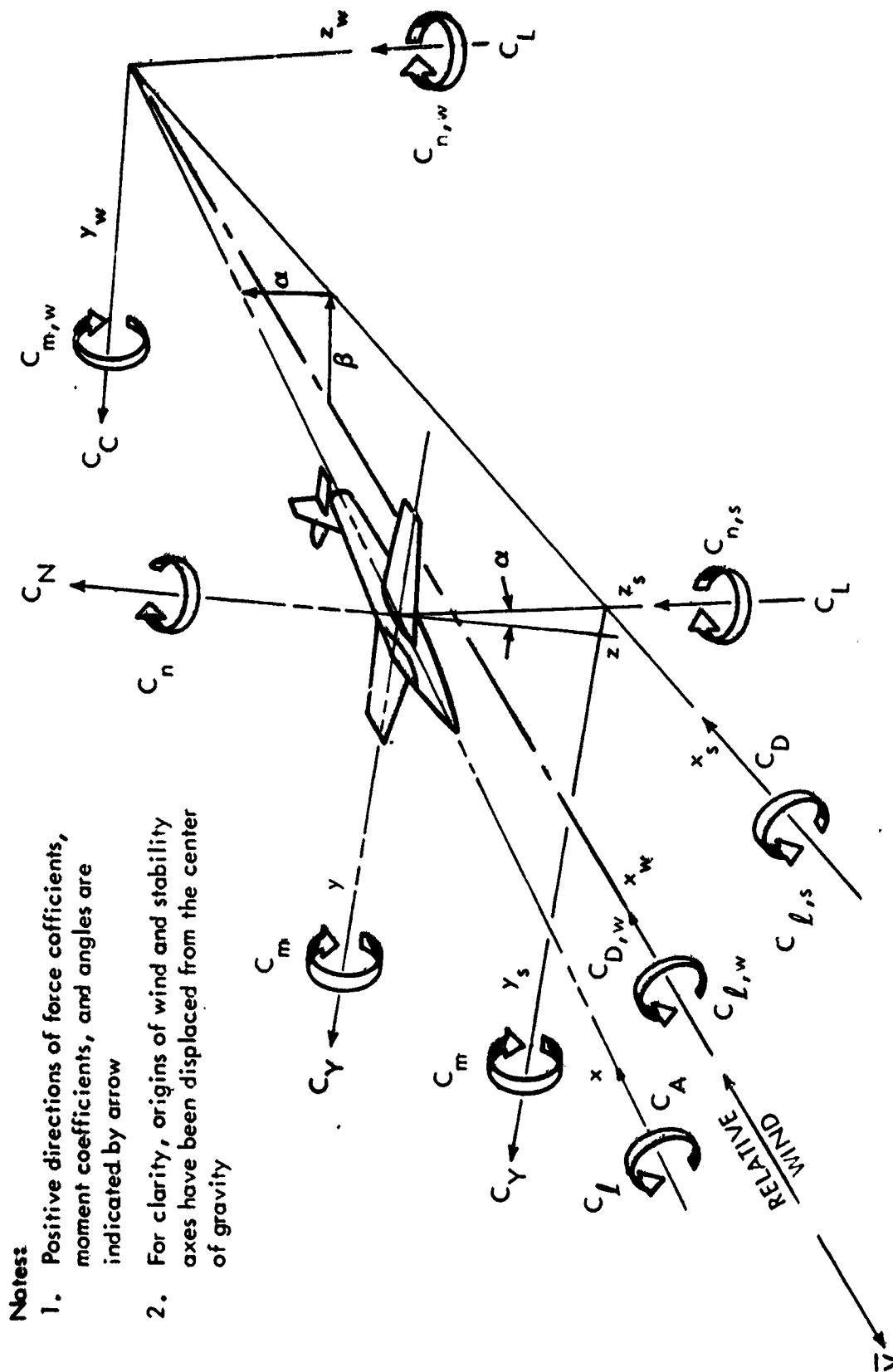


LEFT SRM

SRM STATION ~ XS			$\theta$ ~ DEG							
FULL	MODEL	XS/Ls	0	45	90	135	180	225	270	315
200	6.00	0	810							
260	7.80	.034	811	812	813	814	815	816	817	818
370	11.10	.097	821	822	823	824	825	826	827	828
400	12.00	.114	831	832	833	834	835	836	837	838
450	13.50	.142	841	842	843	844	845	846	847	848
550	16.50	.199	851	852	853	854	855	856	857	858
700	21.00	.284	861		863		865	866	867	868
850	25.50	.370	871		873		875		877	
1050	31.50	.484	881		883		885			
1250	37.50	.597	891		893		895			
1450	43.50	.711	901		903		905		907	
1650	49.50	.825	911		913		915		917	
1750	52.50	.882	921	922	923	924	925	926	927	928
1790	53.70	.904	931	932	933	934	935	936	937	938
1850	55.50	.939	941	942	943	944	945	946	947	948
1900	57.00	.967	951	952	953	954	955	956	957	958
NOZZLE BASE			801							
SKIRT BASE			802		803		804		805	

e. Left SRM

Table IV. . Concluded.

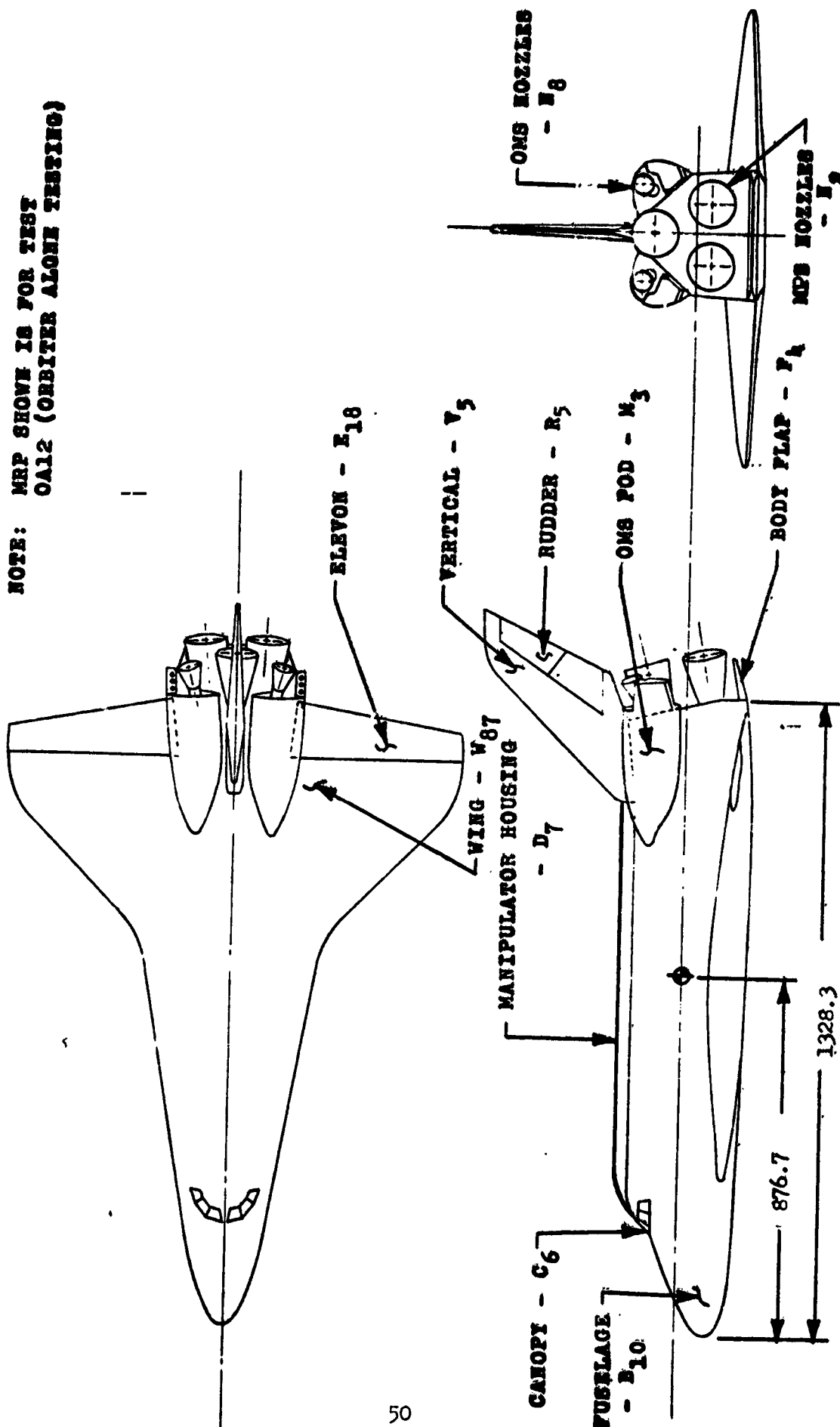


**Notes:**

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrow
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

Figure 1. - Axis Systems.

NOTE: MRP SHOWN IS FOR TEST  
OAL12 (ORBITER ALONE TESTING)



a. Orbiter, O<sub>2A</sub>

Figure 2. - Model Sketches.

SRM S<sub>3</sub>

X<sub>T</sub> 1958

142 DIA.

X<sub>B</sub> 388

X<sub>B</sub> 1755

X<sub>B</sub> 1932

X<sub>B</sub> 200

EXTERNAL TANK T<sub>9</sub>

51

X<sub>T</sub> 2052

324 DIA.

X<sub>T</sub> 316

X<sub>T</sub> 711

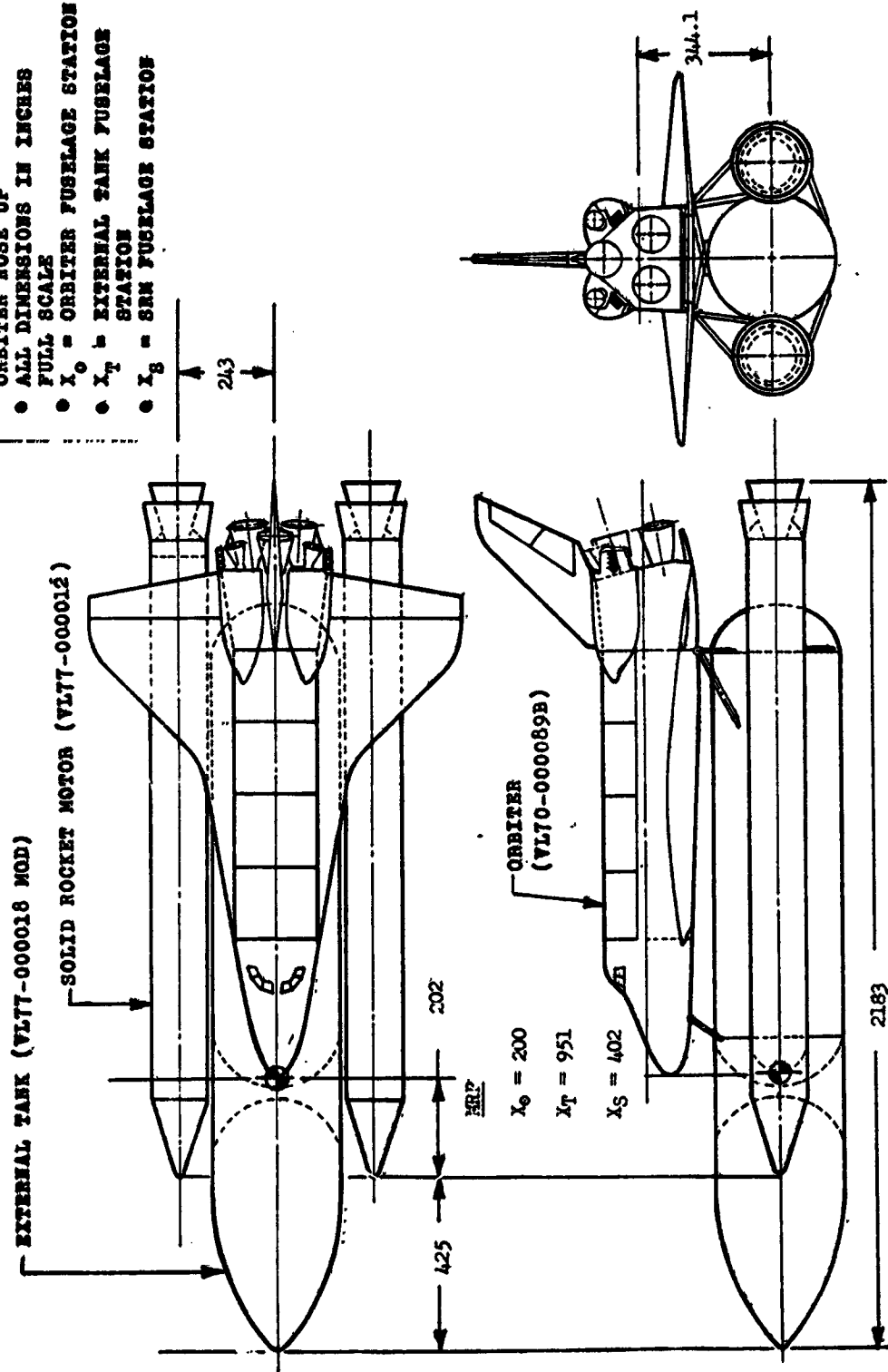
MODEL CUT TO HERE  
FOR STING MOUNT

X<sub>T</sub> 2174

b. SRM, S<sub>3</sub>, and External Tank, T<sub>9</sub>

Figure 2. - Continued.

- NOTES:**
- ORBITER INCIDENCE ANGLE  
RELATIVE TO TANK CL IS  $0.5^\circ$
  - ORBITER NOSE UP
  - ALL DIMENSIONS IN INCHES  
FULL SCALE
  - $X_0$  = ORBITER FUSELAGE STATION
  - $X_T$  = EXTERNAL TANK FUSELAGE  
STATION
  - $X_S$  = SRM FUSELAGE STATION



c. Integrated Vehicle  
Figure 2. - Concluded.





b. Isolated Orbiter (Entry Configuration) Mounted in the ARC 8x7 Ft. Tunnel

Figure 3. - Concluded.

# **TABULATED PRESSURE DATA**

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## TABULATED PRESSURE DATA - 1A98

DATE 20 SEP 73

(RDCB001) ( 24 MAY 73 )

AMES 97-707 1A9 OCA + S3 + T9 ORBITER FUSELAGE

## PARAMETRIC DATA

BETAT = .000 ORBINC = .900  
 RUDBER = .000 ELEVON = .000  
 RUDELR = .000

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 DREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0310 SCALE

ALPHAT ( 1 ) = -8.400

MACH ( 1 ) = 1.555

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .0020 .0075 .0188 .0339 .0612 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3210 .3953 .5120

PHI	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
20.000	1.4930	1.0030	.4370	-.1370	.0090	.0290	.1440	.0520	.1560	.1470	-.0190	-.0750	.0820	.0730	-.0720
40.000	.4360	-.0990	-.0010	.0370	.1490	.1980	.1160	.0220	.0730	.0230	-.0160	-.0720	.0820	.0730	-.0720
60.000	.4990	-.0630	.0460	.0760	.1980	.2990	.1430	.0190	-.1470	-.1810	-.0360	.0820	.0730	.0730	-.0720
80.000	.5110	-.0550	.0890	.2020	.2990	.3480	.0190	-.1470	-.1810	-.0360	.0820	.0730	.0730	.0730	-.0720
100.000	.5040	-.0300	.0830	.2670	.3480	.4270	.0190	-.1470	-.1810	-.0360	.0820	.0730	.0730	.0730	-.0720
120.000	.4830	.0170	.1120	.3810	.4270	.7080	-.1690	-.1070	.0000	-.0350	-.0110	-.0110	-.0110	-.0110	-.0110
140.000	.5190	.0840	.2320	.5570	.7080	.8960	-.3010	-.0850	-.0250	-.0180	-.0250	-.0250	-.0250	-.0250	-.0250
160.000	.5690	.1980	.3480	.8740	.8960	.6190	-.2340	-.1710	.0220	-.0170	-.0530	-.0530	-.0530	-.0530	-.0530
180.000	.5210	.2920	.4010	1.0860	1.2810	.6340	-.2340	-.1710	.0220	-.0170	-.0530	-.0530	-.0530	-.0530	-.0530
200.000	1.4930	1.1110	.5210	.2920	.4010	.8740	.9639	1.0015	1.0392	1.0392	1.0392	1.0392	1.0392	1.0392	1.0392
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392	1.0392	1.0392	1.0392	1.0392	1.0392
PHI	.000	-.0870	-.0570	-.1130	-.1940	-.2830	-.3710	-.4590	-.5470	-.6350	-.7230	-.8110	-.9000	-.9880	-.1070
40.000	-.0890	-.0570	-.1130	-.1940	-.2830	-.3710	-.4590	-.5470	-.6350	-.7230	-.8110	-.9000	-.9880	-.1070	-.1070
60.000	-.0870	-.0570	-.1130	-.1940	-.2830	-.3710	-.4590	-.5470	-.6350	-.7230	-.8110	-.9000	-.9880	-.1070	-.1070
80.000	-.0870	-.0570	-.1130	-.1940	-.2830	-.3710	-.4590	-.5470	-.6350	-.7230	-.8110	-.9000	-.9880	-.1070	-.1070
100.000	-.0870	-.0570	-.1130	-.1940	-.2830	-.3710	-.4590	-.5470	-.6350	-.7230	-.8110	-.9000	-.9880	-.1070	-.1070
120.000	-.0870	-.0570	-.1130	-.1940	-.2830	-.3710	-.4590	-.5470	-.6350	-.7230	-.8110	-.9000	-.9880	-.1070	-.1070
140.000	-.0870	-.0570	-.1130	-.1940	-.2830	-.3710	-.4590	-.5470	-.6350	-.7230	-.8110	-.9000	-.9880	-.1070	-.1070
160.000	-.0870	-.0570	-.1130	-.1940	-.2830	-.3710	-.4590	-.5470	-.6350	-.7230	-.8110	-.9000	-.9880	-.1070	-.1070
180.000	-.0870	-.0570	-.1130	-.1940	-.2830	-.3710	-.4590	-.5470	-.6350	-.7230	-.8110	-.9000	-.9880	-.1070	-.1070
200.000	-.0870	-.0570	-.1130	-.1940	-.2830	-.3710	-.4590	-.5470	-.6350	-.7230	-.8110	-.9000	-.9880	-.1070	-.1070

AMES 97-707 1A9 CEA + S3 + T9 ORBITER FUSELAGE (RBC801)

MACH ( 1 ) = 1.555 ALPHAT( 2 ) = -6.330

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0612	.1355	.1506	.1561	.1732	.1958	.2259	.2711	.3210	.3953	.5121
PHI															
.0000	1.4710	1.0110	.4350	-.1470	-.0860	.0290		.1360	.0250	.0170	.1100	.1100	-.0130	-.0730	
20.0000			.4510	-.1080	-.0350	.0340		.1300	.0050						
40.0000			.5090	-.0900	.0130	.0730		.1150	.0000	.0370	-.0230	-.0220	-.0680		
55.0000			.5150	-.0460	.0800	.1860		.1740	.0990						
70.0000			.4940	-.0190	.0760	.2340		.2790	.1420	-.1640	-.2330	-.0690	.0530		
90.0000			.4660	.0150	.0960	.3060		.3430	.0220	-.2070	-.2040	-.0630	.0430		
120.0000		1.0230	.4830	.0720	.1950	.5230		.4250	.0210	-.2170	-.1720	-.1110	-.0080		
142.0000										-.1770					
150.0000			.5190	.1600	.3000	.8370		.6820	-.1220	-.1330	.0200	.0600	-.0420		
157.0000							.8780								
162.0000								.5920	-.3160	-.1110	-.0580	-.0460	-.0530		
165.0000								.5980							
169.0000															
172.0000						1.1600									
180.0000	1.4710	1.0570	.4650	.2440	.3410	1.0390		.8360	-.2570	-.1970	-.0290	-.0440	-.0430		

X/LB .5973 .6626 .7380 .7869 .8289 .8648 .9262 .9639 1.0015 1.0392

## PHI

.0000	-.0630														
40.0000	-.0930	-.0370	-.1080	-.1890	-.2420										
70.0000		-.0490	-.0330	.0610	.0100	-.0310	-.0540								
90.0000		-.0240	.0800	.0210	.0130	-.0520	-.0580								
105.0000			.1100	.0440	.0120	-.0640	-.0610								
110.0000								-.0550							
120.0000	.0110	-.0180	.2700	.0740	-.1390	-.0730	-.0370	-.0160							
135.0000		.6490	.4130	-.0620	-.1620	-.1620	-.0290								
150.0000	.0260	.0170	.3540	.4870	.1390	.0880	.0580								
165.0000	.0280	.0280	.3770	.5380	.2530	.1730	-.0780								
180.0000	.0220	.0320	.3010												

MACH ( 1 ) = 1.555 ALPHAT( 3 ) = -4.250

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0612	.1355	.1506	.1561	.1732	.1958	.2259	.2711	.3210	.3953	.5121
PHI															
.0000	1.4570	1.0450	.4750	-.1420	-.1360	.0780		.1250	.0110	-.0540	.0650	.0610	-.0540		
20.0000			.4820	-.1010	-.1190	.0730		.1190	.0000						
40.0000			.5210	-.0840	-.0110	.0930		.1130	-.0030	-.0410	-.0330	-.0320	-.0540		
55.0000			.5120	-.0380	.0610	.1770		.1490	.0820						
70.0000			.4870	-.0140	.0630	.2100		.2620	.0590	-.1770	-.2540	-.0910	.0290		
90.0000		1.0450	.4480	-.0140	.0770	.2280		.3320	.0110	-.2110	-.2200	-.0940	.0130		
120.0000			.4460	.0570	.1610	.4610		.4230	.0080	-.2250	-.1900	-.1340	-.0340		



$$\text{ALPHAT}(4) = -2.190$$

ALPHAT( 4) = -2.19D

## DEPENDENT VARIABLE CP-

**SECTION ( 1 ) ORBITER FUSELAGE**

[illegible]
$$\text{ALPHAT}(5) = -.120$$
$$\text{ALPHAT}(5) = -.120$$

## DEPENDENT VARIABLE CP

## SECTION 1 ORBITER FUSELAGE

[illegible]



ANES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE (R90801)

MACH (1) = 1.555 ALPHA(6) = 1.950

## SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

165.000 -.0220 .2370 .3050 .1270 .0580 -.1420  
180.000 -.0260 -.0190 .1970

MACH (1) = 1.555 ALPHA(7) = 4.010

## SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

.0000 1.3420 1.2410 .5110 -.1780 -.2010 .2120 .0740 -.1420 -.1520 -.1520 -.1520 -.1520 -.1520  
20.000 .5540 -.1190 -.1840 .1640 .0420 -.0930 -.0950 -.0950 -.0950 -.0950 -.0950  
40.000 .6250 -.1150 -.1440 .0670 -.0010 .0150 .0150 .0150 .0150 .0150 .0150  
55.000 .6740 -.1340 .0480 .1110 .1260 .0200 .0200 .0200 .0200 .0200 .0200  
70.000 .4810 .0110 .0120 .1170 .2560 -.0030 -.0030 -.0030 -.0030 -.0030  
90.000 .9160 .3880 -.0370 .0660 .1280 .2680 -.2090 -.2090 -.2090 -.2090 -.2090  
120.000 .3090 -.0340 .0720 .3140 .5640 -.2740 -.2740 -.2740 -.2740 -.2740  
142.000 .2870 -.0400 .0870 .5990 .4640 -.3920 -.3920 -.3920 -.3920 -.3920  
157.000 .1570 .1420 .0870 .9950 .4320 -.3270 -.3270 -.3270 -.3270 -.3270  
162.000 .1620 .1620 .1620 .9950 .6430 -.3470 -.3470 -.3470 -.3470 -.3470  
165.000 .1650 .1650 .1650 .9950 .6430 -.3470 -.3470 -.3470 -.3470 -.3470  
169.000 .1690 .1690 .1690 .9950 .6430 -.3470 -.3470 -.3470 -.3470 -.3470  
172.000 .1720 .1720 .1720 .9950 .6430 -.3470 -.3470 -.3470 -.3470 -.3470  
180.000 .1800 .1800 .1800 .9950 .6430 -.3470 -.3470 -.3470 -.3470 -.3470

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.0000 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520  
40.000 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520  
70.000 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520  
90.000 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520  
105.000 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520  
110.000 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520  
120.000 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520  
135.000 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520  
150.000 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520  
165.000 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520  
180.000 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520

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TABULATED PRESSURE DATA - 1A9B

AMES 97-707 1A9 OCA + S3 + T9 ORBITER FUSELAGE

(RBCB01)

PAGE 7

MACH ( 1 ) = 1.555      ALPHAT( 8 ) = 6.060

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER FUSELAGE

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PMI															
.000	1.5100	1.2110	.4910	-.1810	-.1710	.1550			.0680	-.0910	-.1330	-.1680	.1830	.0570	
20.000			.5390	-.1340	-.1650	.1020			.0060	-.0690	-.1090	-.0880	-.0210	.0650	
40.000			.6150	-.0340	-.0460	.0770			-.0580	-.0670	-.1120	-.0880	-.0210	.0650	
55.000			.6070	-.0270	-.0380	.0890			.0040	.0050	-.1920	-.2560	-.1240	-.0790	
70.000			.5290	.0140	-.0050	.0920			.0470	-.0020	-.2650	-.2560	-.2120	-.0950	
90.000			.4010	-.0630	.0210	.1140			.2410	-.0770	-.2750	-.2830	-.2200	-.0950	
120.000		.9940	.2660	-.0630	.0400	.1530			.3110	-.2260	-.2930	.0270	-.1840	-.1040	
142.000			.2380	-.0750	.0510	.5810		.7450	.5230	-.2240	-.2930	.0270	-.1840	-.1040	
150.000									.4300	-.3920	-.2350	-.2110	-.1790	-.1120	
162.000									.3870	-.3630	-.3110	-.1490	-.1740	-.1250	
169.000						.6950	.9570		.5910						
172.000		.7090	.1490	-.0220	.0570	.6950									
180.000	1.5100	.7090	.1490	-.0220	.0570	.6950									
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

PMI

.0260

.0440

.2010

.1310

.1020

.0740

.0430

.0120

.0060

.0020

.0010

.0000

.0000

.0000

.0000

.0000

.0000

.0000

.0000

.0000

MACH ( 1 ) = 1.555      ALPHAT( 9 ) = 8.130

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER FUSELAGE

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PMI															
.000	1.5050	1.1940	.4350	-.1060	-.1550	.1630			.0500	-.0720	-.1470	-.1910	.2260	.0880	
20.000			.5110	-.1580	-.1580	.0790			.0480	-.0830	-.1310	.1090	-.0020	.0910	
40.000			.6090	-.1040	-.0580	.0390			-.0650	-.0940	-.1310	.1090	-.0020	.0910	
55.000			.6030	-.0280	.0380	.0710			.0420	.0010	-.2020	-.2630	-.1280	-.0910	
70.000			.5420	.0140	-.0120	.0760			.0250	-.0130	-.2480	-.2740	-.1710	-.1030	
90.000		1.0160	.4210	-.1550	.0300	.0920			.2030	-.0720	-.2850	-.2870	-.2480	-.1130	
120.000			.2480	-.0750	.0120	.1260			.3040	-.0920	-.2850	-.2870	-.2480	-.1130	







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TABLE 1. TABULATED PRESSURE DATA - 1A98

JAMES 97-717 1A9 02A + S3 + T9 ORBITER FUSELAGE

(RECEIVED)

CCG.2 = (2) HDVA

ALPHAT( 2) = -6.315

ALPHAT( 2) = -6.315

### SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

Year	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1992	1.0392	1.0393	1.0394	1.0395	1.0396	1.0397	1.0398	1.0399	1.0400	1.0401	1.0402	1.0403	1.0404	1.0405	1.0406	1.0407	1.0408	1.0409	1.0410	1.0411	1.0412	1.0413	1.0414	1.0415	1.0416	1.0417	1.0418	1.0419	1.0420	1.0421	1.0422	1.0423	1.0424	1.0425	1.0426	1.0427	1.0428	1.0429	1.0430	1.0431	1.0432	1.0433	1.0434	1.0435	1.0436	1.0437	1.0438	1.0439	1.0440	1.0441	1.0442	1.0443	1.0444	1.0445	1.0446	1.0447	1.0448	1.0449	1.0450	1.0451	1.0452	1.0453	1.0454	1.0455	1.0456	1.0457	1.0458	1.0459	1.0460	1.0461	1.0462	1.0463	1.0464	1.0465	1.0466	1.0467	1.0468	1.0469	1.0470	1.0471	1.0472	1.0473	1.0474	1.0475	1.0476	1.0477	1.0478	1.0479	1.0480	1.0481	1.0482	1.0483	1.0484	1.0485	1.0486	1.0487	1.0488	1.0489	1.0490	1.0491	1.0492	1.0493	1.0494	1.0495	1.0496	1.0497	1.0498	1.0499	1.0500

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75,000	.0020	-.0050	-.0080	.0410	.0320	.0070	-.0160
90,000	.0260	.0020	.0930	.0950	.0480	-.0070	-.0290
105,000			.1220	.0910	.0490	-.0250	-.0460
110,000					.1280	-.0160	.0040
120,000	.0470	.0320	.2720	.4210	-.0170	.0410	.0820
135,000			.6140				
150,000	.0390	.0410	.2710	.4240	.1060	.1450	.1290
165,000	.0330		.2740	.4970	.2990	.2320	.0380
180,000	.0280	.0420	.0430				

**PACH ( 2 ) =**

$$\text{ALPHAT}(3) = -4.250$$

SECTION : 1) CRIBTER FUSELAGE

DEPENDENT VARIABLE CP

x/LB	.0970	.1075	.1188	.0939	.1612	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3246	.3853	.5121
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**FBI**

[illegible]

87x

x/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
------	-------	-------	-------	-------	-------	-------	-------	-------	--------	--------

III

PFI
.009
.0487)
- .0670      - .1837
- .1070
r.1140

125.

105.120	.1010	.0745	.0320	-.1050	-.3000	.1540
110.140	.0230	.0170	-.0290	-.0360	-.0180	.0380
120.090	.5990	.3840	-.0300	.0150	.0670	
135.140	.0110	.2360	.0710	.1170	.1040	
150.120		.0170	.3850			

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## TABULATED PRESSURE DATA - 1A9B

(RBOB01)

AMES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.0000

ALPHAT ( 3 ) = -4.250

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.0110 .0140 .0160 .0180 .0200 .0220 .0240 .0260 .0280 .0300

165.0000

.2380 .3360 .4360 .5370 .6370 .7370 .8370 .9370 .10370 .11370

180.0000

.0140 .0160 .0180 .0200 .0220 .0240 .0260 .0280 .0300 .0320

MACH ( 2 ) = 2.0000

ALPHAT ( 4 ) = -2.210

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0189 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3270 .3953 .5120

PHI

.5170 .0890 .0240 .2280 .2280 .2280 .2280 .2280 .2280 .2280 .2280 .2280 .2280 .2280 .2280

20.0000

.4950 .1160 .0410 .2120 .2120 .2120 .2120 .2120 .2120 .2120 .2120 .2120 .2120 .2120 .2120

40.0000

.5180 .1110 .1410 .2370 .2370 .2370 .2370 .2370 .2370 .2370 .2370 .2370 .2370 .2370 .2370

55.0000

.5010 .1240 .1670 .2840 .2840 .2840 .2840 .2840 .2840 .2840 .2840 .2840 .2840 .2840 .2840

70.0000

.4870 .1060 .0680 .2750 .2750 .2750 .2750 .2750 .2750 .2750 .2750 .2750 .2750 .2750 .2750

90.0000

.4830 .0630 .0690 .2750 .2750 .2750 .2750 .2750 .2750 .2750 .2750 .2750 .2750 .2750 .2750

120.0000

.5120 .1350 .1270 .1830 .1830 .1830 .1830 .1830 .1830 .1830 .1830 .1830 .1830 .1830 .1830

142.0000

.5270 .1770 .2190 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300

150.0000

.5270 .1770 .2190 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300

157.0000

.5270 .1770 .2190 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300

162.0000

.5270 .1770 .2190 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300

165.0000

.5270 .1770 .2190 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300

169.0000

.5270 .1770 .2190 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300

172.0000

.5270 .1770 .2190 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300

180.0000

.5270 .1770 .2190 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300 .4300

X/LB

.5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.0110 .0140 .0160 .0180 .0200 .0220 .0240 .0260 .0280 .0300

40.0000

.2380 .3360 .4360 .5370 .6370 .7370 .8370 .9370 .10370 .11370

70.0000

.0140 .0160 .0180 .0200 .0220 .0240 .0260 .0280 .0300 .0320

90.0000

.0140 .0160 .0180 .0200 .0220 .0240 .0260 .0280 .0300 .0320

105.0000

.0140 .0160 .0180 .0200 .0220 .0240 .0260 .0280 .0300 .0320

110.0000

.0140 .0160 .0180 .0200 .0220 .0240 .0260 .0280 .0300 .0320

120.0000

.0140 .0160 .0180 .0200 .0220 .0240 .0260 .0280 .0300 .0320

135.0000

.0140 .0160 .0180 .0200 .0220 .0240 .0260 .0280 .0300 .0320

150.0000

.0140 .0160 .0180 .0200 .0220 .0240 .0260 .0280 .0300 .0320

165.0000

.0140 .0160 .0180 .0200 .0220 .0240 .0260 .0280 .0300 .0320

180.0000

.0140 .0160 .0180 .0200 .0220 .0240 .0260 .0280 .0300 .0320







## TABULATED PRESSURE DATA - 1A99

AVES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE (RBOB01)

MACH ( 2 ) = 2.000 ALPHAT ( 9 ) = 5.980

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP				
X/LB						
PHI						
70.000	-.0980	-.1130	-.1230	-.0800	-.0680	-.1030
90.000	-.0670	-.0880	-.0690	-.0470	-.0870	-.1160
105.000			.0530	.0330	-.0420	-.0990
110.000						.0560
120.000	-.0470	-.0450	.2170	.0960	-.0670	-.0940
135.000			.1770	.1850	-.0680	-.0450
150.000	-.0430	-.0280	.1170	.1350	.0090	.0100
165.000	-.0510		.1340	.1650	.0920	.0520
180.000	-.0680	-.0290	.0450			-.0610

MACH ( 2 ) = 2.000 ALPHAT ( 9 ) = 8.020

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP				
X/LB						
PHI						
70.000	1.2720	1.1110	.7700	.1550	.0240	.2010
90.000	.7720	.2100	.0230	.2160	.0250	.1860
105.000	.6950	.2190	.1810	.2130	.0760	.1250
120.000	.5930	.2420	.1370	.1320	.0980	.0760
135.000	.5090	.1510	.0810	.1420	.1070	.0980
150.000	.8940	.4140	.0300	.0640	.1480	.0750
165.000	.3360	.0190	.0420	.1650	.1080	.1360
180.000					.3250	.0290
					-.0470	-.1590
					-.0990	-.1370
					-.1520	-.1710
					.6270	-.1240
					.4840	-.1070
					.4660	-.1130
					.6070	-.1020
					.6460	-.1190
					.9639	-.0850
					.9262	-.0760
					1.0015	-.0850
					1.0392	-.1190

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP				
X/LB						
PHI						
70.000	.1720					-.0540
90.000	.1280	.1370	.0820	.0330	.0270	-.1250
105.000	-.1130	-.1240	-.1320	-.1040	-.0770	-.1130
120.000	-.0760	-.0990	-.0420	-.0150	-.0440	-.0860
135.000			.0770	.0410	-.0440	-.1010
150.000	-.0640	-.0690	.2300	.0730	-.0620	-.0940
165.000			.1960	.1780	-.0810	-.0630
180.000	-.0550	-.0140	.0850	.0890	.0110	.0070
						-.0040
						-.0240
						-.0300
						.0600
						.0300
						-.0280
						-.0690

DATE 20: SEP 73

(R09B:9)

AMES 97-717 1A9 C2A + S3 + T9 ORB1 TER FUSELAGE

ALFPHAT( 9) = 0.022

DEPENDENT VARIABLE CF

SECTION ( ) ORBITER FUSELAGE	DEPENDENT VARIABLE CP
7000	.9639
8000	.9262
9000	1.0015
10000	1.0392

**PHI**

195. 2223  
165. 2223

— 0571  
— 0620

5000  
5000

1932

**1995**



AMES 97-707 1A9 C2A + S3 + T9 CRB I TER FUSELAGE

## PARAMETRIC DATA

SREF	=	28.4211	SQ.FT.	YMRP	=	28.5300	INCHES
LREF	=	39.8495	INCHES	YMRP	=	.0000	INCHES
BREF	=	39.8495	INCHES	ZMRP	=	.0000	INCHES
SCALE	=	.0300 SCALE					

ALPHAT =	0.000	CRSINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

BETAT ( 1 ) = -7.145

BETAT ( 1 ) = -7.145

INDEPENDENT VARIABLE	DEPENDENT VARIABLE CP
AGE	
SEX	
RELIGION	
EDUCATION	
INCOME	
ETHNICITY	
RESIDENCE	
EMPLOYMENT	
HEALTH STATUS	
PSYCHOLOGICAL FACTORS	
SOCIAL SUPPORT	
ACCESS TO SERVICES	
ADHERENCE TO TREATMENT	
COMORBIDITIES	
GENETIC FACTORS	
ENVIRONMENTAL FACTORS	
PROVIDER FACTORS	
SYSTEMIC BARRIERS	
HEALTHCOSTS	
QUALITY OF CARE	
PROVIDER ATTITUDE	
PATIENT ATTITUDE	
PROVIDER KNOWLEDGE	
PATIENT KNOWLEDGE	
PROVIDER EMPLOYMENT	
PATIENT EMPLOYMENT	
PROVIDER EDUCATION	
PATIENT EDUCATION	
PROVIDER INCOME	
PATIENT INCOME	
PROVIDER ETHNICITY	
PATIENT ETHNICITY	
PROVIDER RESIDENCE	
PATIENT RESIDENCE	
PROVIDER EMPLOYMENT STATUS	
PATIENT EMPLOYMENT STATUS	
PROVIDER HEALTH STATUS	
PATIENT HEALTH STATUS	
PROVIDER PSYCHOLOGICAL FACTORS	
PATIENT PSYCHOLOGICAL FACTORS	
PROVIDER SOCIAL SUPPORT	
PATIENT SOCIAL SUPPORT	
PROVIDER ACCESS TO SERVICES	
PATIENT ACCESS TO SERVICES	
PROVIDER ADHERENCE TO TREATMENT	
PATIENT ADHERENCE TO TREATMENT	
PROVIDER COMORBIDITIES	
PATIENT COMORBIDITIES	
PROVIDER GENETIC FACTORS	
PATIENT GENETIC FACTORS	
PROVIDER ENVIRONMENTAL FACTORS	
PATIENT ENVIRONMENTAL FACTORS	
PROVIDER PROVIDER FACTORS	
PATIENT PROVIDER FACTORS	
PROVIDER SYSTEMIC BARRIERS	
PATIENT SYSTEMIC BARRIERS	
PROVIDER HEALTHCOSTS	
PATIENT HEALTHCOSTS	
PROVIDER QUALITY OF CARE	
PATIENT QUALITY OF CARE	
PROVIDER PROVIDER ATTITUDE	
PATIENT PROVIDER ATTITUDE	
PROVIDER PROVIDER KNOWLEDGE	
PATIENT PROVIDER KNOWLEDGE	
PROVIDER PROVIDER EMPLOYMENT	
PATIENT PROVIDER EMPLOYMENT	
PROVIDER PROVIDER EDUCATION	
PATIENT PROVIDER EDUCATION	
PROVIDER PROVIDER INCOME	
PATIENT PROVIDER INCOME	
PROVIDER PROVIDER ETHNICITY	
PATIENT PROVIDER ETHNICITY	
PROVIDER PROVIDER RESIDENCE	
PATIENT PROVIDER RESIDENCE	
PROVIDER PROVIDER EMPLOYMENT STATUS	
PATIENT PROVIDER EMPLOYMENT STATUS	
PROVIDER PROVIDER HEALTH STATUS	
PATIENT PROVIDER HEALTH STATUS	
PROVIDER PROVIDER PSYCHOLOGICAL FACTORS	
PATIENT PROVIDER PSYCHOLOGICAL FACTORS	
PROVIDER PROVIDER SOCIAL SUPPORT	
PATIENT PROVIDER SOCIAL SUPPORT	
PROVIDER PROVIDER ACCESS TO SERVICES	
PATIENT PROVIDER ACCESS TO SERVICES	
PROVIDER PROVIDER ADHERENCE TO TREATMENT	
PATIENT PROVIDER ADHERENCE TO TREATMENT	
PROVIDER PROVIDER COMORBIDITIES	
PATIENT PROVIDER COMORBIDITIES	
PROVIDER PROVIDER GENETIC FACTORS	
PATIENT PROVIDER GENETIC FACTORS	
PROVIDER PROVIDER ENVIRONMENTAL FACTORS	
PATIENT PROVIDER ENVIRONMENTAL FACTORS	
PROVIDER PROVIDER PROVIDER FACTORS	
PATIENT PROVIDER PROVIDER FACTORS	
PROVIDER PROVIDER SYSTEMIC BARRIERS	
PATIENT PROVIDER SYSTEMIC BARRIERS	
PROVIDER PROVIDER HEALTHCOSTS	
PATIENT PROVIDER HEALTHCOSTS	
PROVIDER PROVIDER QUALITY OF CARE	
PATIENT PROVIDER QUALITY OF CARE	
PROVIDER PROVIDER PROVIDER ATTITUDE	
PATIENT PROVIDER PROVIDER ATTITUDE	
PROVIDER PROVIDER PROVIDER KNOWLEDGE	
PATIENT PROVIDER PROVIDER KNOWLEDGE	
PROVIDER PROVIDER PROVIDER EMPLOYMENT	
PATIENT PROVIDER PROVIDER EMPLOYMENT	
PROVIDER PROVIDER PROVIDER EDUCATION	
PATIENT PROVIDER PROVIDER EDUCATION	
PROVIDER PROVIDER PROVIDER INCOME	
PATIENT PROVIDER PROVIDER INCOME	
PROVIDER PROVIDER PROVIDER ETHNICITY	
PATIENT PROVIDER PROVIDER ETHNICITY	
PROVIDER PROVIDER PROVIDER RESIDENCE	
PATIENT PROVIDER PROVIDER RESIDENCE	
PROVIDER PROVIDER PROVIDER EMPLOYMENT STATUS	
PATIENT PROVIDER PROVIDER EMPLOYMENT STATUS	
PROVIDER PROVIDER PROVIDER HEALTH STATUS	
PATIENT PROVIDER PROVIDER HEALTH STATUS	
PROVIDER PROVIDER PROVIDER PSYCHOLOGICAL FACTORS	
PATIENT PROVIDER PROVIDER PSYCHOLOGICAL FACTORS	
PROVIDER PROVIDER PROVIDER SOCIAL SUPPORT	
PATIENT PROVIDER PROVIDER SOCIAL SUPPORT	
PROVIDER PROVIDER PROVIDER ACCESS TO SERVICES	
PATIENT PROVIDER PROVIDER ACCESS TO SERVICES	
PROVIDER PROVIDER PROVIDER ADHERENCE TO TREATMENT	
PATIENT PROVIDER PROVIDER ADHERENCE TO TREATMENT	
PROVIDER PROVIDER PROVIDER COMORBIDITIES	
PATIENT PROVIDER PROVIDER COMORBIDITIES	
PROVIDER PROVIDER PROVIDER GENETIC FACTORS	
PATIENT PROVIDER PROVIDER GENETIC FACTORS	
PROVIDER PROVIDER PROVIDER ENVIRONMENTAL FACTORS	
PATIENT PROVIDER PROVIDER ENVIRONMENTAL FACTORS	
PROVIDER PROVIDER PROVIDER PROVIDER FACTORS	
PATIENT PROVIDER PROVIDER PROVIDER FACTORS	
PROVIDER PROVIDER PROVIDER SYSTEMIC BARRIERS	
PATIENT PROVIDER PROVIDER SYSTEMIC BARRIERS	
PROVIDER PROVIDER PROVIDER HEALTHCOSTS	
PATIENT PROVIDER PROVIDER HEALTHCOSTS	
PROVIDER PROVIDER PROVIDER QUALITY OF CARE	
PATIENT PROVIDER PROVIDER QUALITY OF CARE	
PROVIDER PROVIDER PROVIDER PROVIDER ATTITUDE	
PATIENT PROVIDER PROVIDER PROVIDER ATTITUDE	
PROVIDER PROVIDER PROVIDER PROVIDER KNOWLEDGE	
PATIENT PROVIDER PROVIDER PROVIDER KNOWLEDGE	
PROVIDER PROVIDER PROVIDER PROVIDER EMPLOYMENT	
PATIENT PROVIDER PROVIDER PROVIDER EMPLOYMENT	
PROVIDER PROVIDER PROVIDER PROVIDER EDUCATION	
PATIENT PROVIDER PROVIDER PROVIDER EDUCATION	
PROVIDER PROVIDER PROVIDER PROVIDER INCOME	
PATIENT PROVIDER PROVIDER PROVIDER INCOME	
PROVIDER PROVIDER PROVIDER PROVIDER ETHNICITY	
PATIENT PROVIDER PROVIDER PROVIDER ETHNICITY	
PROVIDER PROVIDER PROVIDER PROVIDER RESIDENCE	
PATIENT PROVIDER PROVIDER PROVIDER RESIDENCE	
PROVIDER PROVIDER PROVIDER PROVIDER EMPLOYMENT STATUS	
PATIENT PROVIDER PROVIDER PROVIDER EMPLOYMENT STATUS	

[illegible]





DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98

FACE 20

AVES 97-707 1A9 CCA + S3 + T9 ORBITER FUSELAGE

(R00012)

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.110

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

180.000 1.2765 .6720 .1020 -.0900 .0330 .4810 .5290 -.3910 -.2910 -.2820 -.2490 -.2190

X/LB

.5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.0000 .0410 .1270 .1550 .1260 .0510 -.1780 -.1130 -.0420 -.0080 -.0930

40.000 .0270 .1320 .1320 .0750 .1370 .0780 .0860 .1190 .1550

70.000 .0720 .0720 .0380 .0420 .0510 .0510 .1580 .1590

90.000 .0720 .0720 .1110 .0200 .0920 .1740 .1780

110.000 .0350 .0800 .2410 .0250 .1460 .1490 .1370 .1320

120.000 .1240 .0760 .2780 .2960 .0290 .0400 .0590

130.000 .1030 .1030 .2990 .3500 .0860 .0160 .1740

140.000 .1070 .0800 .1360

MACH ( 1 ) = 1.555

BETAT ( 5 ) = 7.140

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

.0000 1.3110 1.1940 .4820 -.1930 -.2220 .0450 .0020 -.0830 -.1250 -.1240 -.1120 .0680

20.000 .4070 .1940 .2270 .0370 .0370 .0210 .0210 .0540 .1930 .1310 .0140 .0810

40.000 .4010 .1940 .2080 .0100 .0100 .0460 .0460 .0630 .1930 .1310 .0140 .0810

50.000 .3480 .1740 .2120 .0140 .0140 .0710 .0710 .0710 .1930 .1310 .0140 .0810

70.000 .2430 .1670 .2370 .0760 .0760 .1920 .1920 .1920 .1930 .1310 .0140 .0810

90.000 .6970 .1340 .2390 .2070 .0790 .0790 .0790 .0790 .1930 .1310 .0140 .0810

110.000 .0650 .2190 .1330 .1970 .1970 .3440 .3440 .3440 .1930 .1310 .0140 .0810

120.000 .0790 .1640 .0570 .3350 .3350 .5770 .5770 .5770 .1930 .1310 .0140 .0810

130.000 .1620 .1620 .1620 .1620 .1620 .1620 .1620 .1620 .1930 .1310 .0140 .0810

140.000 .1620 .1620 .1620 .1620 .1620 .1620 .1620 .1620 .1930 .1310 .0140 .0810

150.000 .1620 .1620 .1620 .1620 .1620 .1620 .1620 .1620 .1930 .1310 .0140 .0810

160.000 .1620 .1620 .1620 .1620 .1620 .1620 .1620 .1620 .1930 .1310 .0140 .0810

170.000 .1620 .1620 .1620 .1620 .1620 .1620 .1620 .1620 .1930 .1310 .0140 .0810

180.000 1.3110 .6490 .0840 .0820 .0450 .4410 .7460 .4910 .4910 .4910 .4910 .4910 .4910 .4910

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.0000 .1930 .1930 .1930 .1930 .1930 .1930 .1930 .1930 .1930 .1930 .1930 .1930 .1930 .1930

40.000 .1930 .1930 .1930 .1930 .1930 .1930 .1930 .1930 .1930 .1930 .1930 .1930 .1930 .1930

## TABULATED PRESSURE DATA - 1A98

(RDX012)

AMES 97-757 1A9 CCA + S3 + T9 ORBITER FUSELAGE

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MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.145  
 SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP  
 X/LB .5873 .6626 .7340 .7869 .8283 .8648 .9262 .9639 1.0015 1.0392

PHI  
 70.000 -.0465 -.1220 -.1820 -.1240 -.1320 -.1600 -.1870  
 90.000 -.0140 -.0680 -.1510 -.1870 -.1350 -.1980 -.2020  
 105.000 .0670 -.0260 -.1350 -.2090 -.2220  
 110.000 .0210 -.0120 .2050 -.0240 -.1830 -.1880 -.1810  
 120.000 .4850 .2850 -.1840 -.1380 -.1190  
 135.000 .0020 -.1020 .2610 .2470 -.0980 -.0640 -.1210  
 150.000 .0410 .2840 .3640 .0610 -.0120 -.2060  
 165.000 -.1020 -.0210 .1540  
 180.000

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.190

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP  
 X/LB .0020 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI  
 70.000 1.2750 1.1510 .5130 -.1270 -.1410 -.1060  
 90.000 .4050 -.1750 -.2310 -.1400  
 105.000 .3310 -.1760 -.2460 -.0680  
 120.000 .2620 -.1940 -.2650 -.0650  
 135.000 .1810 -.2120 -.2750 .0610  
 150.000 .0770 -.2800 -.2540 .0810  
 165.000 .0300 -.2570 -.1800 .1520  
 180.000 .0540 -.1750 -.0760 .2390  
 1.2750 .6310 .0850 -.0920 .0510 .3700  
 .5873 .6626 .7340 .7869 .8283 .8648 .9262 .9639 1.0015 1.0392

PHI  
 70.000 .0420  
 90.000 .0290  
 105.000 -.1370  
 120.000 -.1720  
 135.000 -.1250  
 150.000 -.0450  
 165.000 -.0590  
 180.000 .0170  
 .0610  
 .2060  
 .1390  
 .0720  
 .1930  
 .4610  
 .1710  
 .1049  
 -.1170  
 -.1330  
 -.1670  
 -.2020  
 -.2170  
 -.2140  
 -.2050  
 -.1690  
 -.1400  
 -.1230  
 -.1860  
 -.1049  
 -.1330  
 -.1980  
 -.2000  
 -.2210  
 -.2020  
 -.1870  
 -.1400  
 -.1230  
 -.1860

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE (RSCB22)

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.190

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

165.000 -.0570 .1980 .3230 -.0400 -.0840 -.2360  
180.000 -.1160 -.0730 .0640

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.320

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .5073 .0188 .0339 .0672 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3210 .3953 .5120

PHI

.000 1.2440 1.0440 .6950 .1648 .0240 .0840 .0210 .0210 .0210 .0510 .0220 .0570 .0420 .0250  
20.000 .7570 .3270 .1580 .0460 .0220 .0220 .0220 .0220 .0220 .0580 .0390 .0580 .0820 .1390  
40.000 .8080 .3540 .4150 .0790 .0110 .0110 .0110 .0110 .0110 .0520 .0390 .0580 .0820 .1390  
55.000 .7930 .4220 .2490 .0840 .1610 .1610 .1610 .1610 .1610 .0840 .0840 .0840 .0840 .0840  
70.000 .7520 .4220 .4120 .2680 .1880 .1880 .1880 .1880 .1880 .0380 .0380 .0380 .0380 .0380  
90.000 1.0940 .6410 .2450 .3870 .2720 .2580 .2580 .2580 .2580 .1970 .1970 .1970 .1970 .1970  
120.000 .4800 .1500 .2190 .2390 .4910 .4910 .4910 .4910 .4910 .0670 .0670 .0670 .0670 .0670  
142.000 .3820 .0690 .1330 .2830 .6210 .6210 .6210 .6210 .6210 .0120 .0120 .0120 .0120 .0120  
150.000 .7440 .7440 .7440 .7440 .7440 .7440 .7440 .7440 .7440 .0590 .0590 .0590 .0590 .0590  
157.000 .4370 .4370 .4370 .4370 .4370 .4370 .4370 .4370 .4370 .0590 .0590 .0590 .0590 .0590  
162.000 .6510 .6510 .6510 .6510 .6510 .6510 .6510 .6510 .6510 .0590 .0590 .0590 .0590 .0590  
165.000 .3970 .3970 .3970 .3970 .3970 .3970 .3970 .3970 .3970 .0590 .0590 .0590 .0590 .0590  
169.000 .6510 .6510 .6510 .6510 .6510 .6510 .6510 .6510 .6510 .0590 .0590 .0590 .0590 .0590  
172.000 .6510 .6510 .6510 .6510 .6510 .6510 .6510 .6510 .6510 .0590 .0590 .0590 .0590 .0590  
180.000 1.2440 .7170 .2120 .0330 .0590 .3970 .6510 .6510 .6510 .0590 .0590 .0590 .0590 .0590

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.000 -.0370 .1390 .1390 .3510 .2580 .1920 -.0380 -.0750 -.0390  
40.000 .1160 .1390 .1390 .3510 .2580 .1920 -.0380 -.0750 -.0390  
70.000 -.0390 -.0390 -.0390 -.0390 -.0390 -.0390 -.0390 -.0390 -.0390  
90.000 -.0170 -.0370 .0470 .0590 .0590 .0590 .0590 .0590 .0590  
105.000 .1410 .1830 .0240 .0240 .0240 .0240 .0240 .0240 .0240  
110.000 .1540 .1540 .1540 .1540 .1540 .1540 .1540 .1540 .1540  
120.000 -.1100 -.1100 .6220 .2390 .0210 .0300 .0570 .0630 .0630  
135.000 .0430 .0430 .0430 .0430 .0430 .0430 .0430 .0430 .0430  
150.000 -.0680 -.0750 .0160 .0160 .0160 .0160 .0160 .0160 .0160  
165.000 -.0510 .0240 .0240 .0240 .0240 .0240 .0240 .0240 .0240  
180.000 -.1850 -.1410 -.1020 .0240 .0240 .0240 .0240 .0240 .0240

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ADULTATED PRESSURE DATA - 1A95

(R00042)

ANTS 97-7-7 1A9 02A + S3 + T9 ORBITER FUSELAGE

DETAT ( 2 ) = -6.270

MACH ( 2 ) = 2.000

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB	PHI	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3270	.3953	.5120
0.000	1.2650	1.0240	.7040	.1540	-.0040	.1740				.0640		.0210	-.0300	-.0680	-.0470	-.0380
20.000		.7350	.2890	.1090	.0950					.0570		-.0180	-.0410	-.0240	.0440	-.0950
40.000		.7770	.3180	.3560	.0950					.1320		.0520		-.0350	-.0550	-.1270
55.000		.7580	.3690	.4280	.2150					.1620		.1190	-.0350	-.1050	-.0330	-.1020
70.000		.7100	.3390	.3440	.2350					.1840		.1720	-.0630	-.1160	-.1460	-.1920
90.000	1.0770	.6110	.1870	.3030	.2440					.4740	.0950	.0540	-.0930	.1370	-.1460	-.1920
120.000		.4710	.1250	.1760	.2280					.6180		-.1090	-.1070	.0020	-.0320	-.1110
142.000		.3820	.0630	.1130	.3250				.7580							
150.000										.5850		-.1300	-.0730	-.0960	-.1230	-.1030
157.000										.4450						
162.000								.7350								
165.000										.6210		-.2260	-.1950	-.2460	-.2230	-.1460
169.000																
172.000	1.2650	.7610	.2370	.0450	.0650	.4290										
180.000																

X/LB

PHI

0.000	-.0420	.1070	.3030	.2210	.1750	-.0510										
40.000	.0940	-.0630	-.0540	-.1260	-.0410	-.0760	-.0980									
70.000		-.0620	-.0680	.0180	-.0210	-.0270	-.0710									
90.000		-.0620	-.0680	.0180	-.0210	-.0270	-.0710									
105.000				.1010	.1430	-.0110	-.0840			.0870						
110.000				.5340	.2290	-.0040	-.0550	-.0750		-.0140						
120.000	-.1090	-.1350	.0970	.1390	-.1570	-.1750	-.1660									
135.000		-.0840	.0520	-.0280	-.1710	-.1310	-.1240									
150.000	-.0760	-.0840	.0540	.0950	.0240	.0440	-.0390									
165.000	-.0540															
180.000	-.1350	-.1360	-.0180													

DETAT ( 3 ) = -4.210

MACH ( 2 ) = 2.000

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB	PHI	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3270	.3953	.5120
0.000	1.2650	1.0480	.7040	.1920	.0120	.1870				.1030		.0450	-.0240	-.0650	-.0930	-.0490
20.000		.7230	.2890	.0960	.1530					.0580		.0320	-.0470	-.0210	.0580	.0670
40.000		.7310	.2880	.3020	.1190					.0350		.0280		-.0210	-.0580	.0670
55.000		.6920	.3280	.3370	.1680					.1080		.0960	-.0600	-.1210	-.0790	.0020
70.000		.6370	.2630	.2760	.2090					.1340		.0960	-.0600	-.1320	-.1920	-.0330
90.000	1.0180	.5420	.1310	.2110	.2190					.1800		.1480	-.0600	-.1320	-.1920	-.0330
120.000		.4280	.0890	.1330	.2130					.4590		.0450	-.0240	-.0650	-.0930	-.0490

DATE 20 SEP 73

## TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 ORA + S3 + T9 ORBITER FUSELAGE

(RB08)(2)

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CF

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															
X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

PHI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															

-0.0190  
-0.0810-0.0520  
-0.0690-0.1130  
-0.0910-0.1130  
-0.0690-0.1130  
-0.0690-0.1130  
-0.0690-0.1130  
-0.0690-0.1130  
-0.0690-0.1130  
-0.0690-0.1130  
-0.0690-0.1130  
-0.0690-0.1130  
-0.0690-0.1130  
-0.0690-0.1130  
-0.0690

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.990

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CF

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															
X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

.1560

.1800

.1120

.0760

.1030

.1700

.2180

-.1160

.4140

.5160

.4240

.4670

.6180

.6180

.6180

.6180

.6180

.6180

.6180



DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A90

ANES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

(RBC0012)

MACH ( 2 ) = 2.000

SETAT ( 4 ) = 3.990

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .00000 .00075 .01088 .03339 .06012 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI 180.000 1.3150 .7800 .2390 .0430 .0710 .3250 .6320 -.2210 -.1860 -.1490 -.1500 -.1500 -.1300

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

MACH ( 2 ) = 2.000

BETAT ( 5 ) = 6.060

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .00075 .01088 .03339 .06012 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

PHI .0000 .1080 .1520 .1110 .1330 .1210 .0990 .1100 .1270 .1310 .1290 .1290 .1290 .1290

AMES 97-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE

(2)(b)(i)

**MACH (2) = 2.0000**

BETAT ( 5 ) = 6.960

## SECTION ( 1 ) ORBITER FUSELAGE

**DEPENDENT VARIABLE CP**

x/LB	.5873	.6626	.7385	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
------	-------	-------	-------	-------	-------	-------	-------	-------	--------	--------

PMI

75,000	-1120	-1340	-1270	-1030	-1090	-1280	-1320
90,000	-0780	-1020	-0520	-0860	-0940	-1240	-1310
105,000			-0200	-0500	-0890	-1250	-1430
120,000							
20,000	-0750	-0710	1320	-0050	-1350	-1320	-1090
35,000			4260	3530	-1180	-0990	-0790
50,000	-0920	-0730	0840	1990	-1010	-0740	-0710
65,000	-1220		0720	3660	-0760	-0510	-0930
80,000	-1590	-1520	-0830				

MACH ( 2 ) = 2.5220      BETAT ( 6 ) = 8.120

## 2) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0275	.0188	.0339	.0602	.1355	.1576	.1581	.1732	.1958	.2259	.2711	.3277	.3953	.5121
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FBI

1.2620	1.19410	.6430	.0999	-.0470	.1050	.0370	-.0570	-.0360	-.0640	-.0350	-.0140
.1900		.5760	.0610	-.1020	.1570	.0470	-.0420				
20.000		.4760	.0630	-.1130	.1290	.0030	-.1080	-.1370	-.1600	-.1500	-.0260
40.000		.3720	.0550	-.0990	-.0480	.0020	-.0500				
60.000		.2670	.0380	-.1110	.0050	.0500	.0450	-.1210	-.1800	-.1900	-.1280
80.000	.6740	.1870	-.1160	.0950	-.0340	.1410	.0550	-.1310	-.1800	-.1900	-.1190
100.000		.1540	-.0940	-.0860	-.0300	.0550	-.0120	-.1600	-.1750	-.1530	-.0460
120.000							-.2070				
140.000		.1780	-.0530	-.0220	.1230	.2620	-.2250	-.2450	.0000	-.1110	-.1420

-0.2770 -0.2350 -0.1910 -0.1310 -0.1460

-.226) -.191) -.274) -.244) -.153)

	X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
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1000	-0.0410	-0.0300	-0.0300	-0.0860	-0.0700
40,000	-0.0360	0.0740	-0.0300	-0.1250	-0.0860
70,000	-0.1160	-0.1360	-0.1010	-0.0870	-0.0740
90,000	-0.0650	-0.1030	-0.0530	-0.0740	-0.0770
100,000	-0.0570	-0.0570	-0.0570	-0.0820	-0.1010
100,000	-0.0750	0.1530	0.010	-0.1410	-0.0860
100,000	-0.0610	0.4070	0.2480	-0.0910	-0.0590
100,000	-0.1370	-0.1430	-0.0560	-0.1810	-0.1210
100,000	-0.0720	-0.0680	-0.0680	-0.0680	-0.0680

DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A9B (RES0012)

MACH ( 2 ) = 2.000 REYNOLDS ( 6 ) = 8.120  
 SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP  
 X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392  
 PHI  
 165.0000 -.1670 .0420 .1080 -.0490 -.0500 -.1360  
 180.0000 -.1920 -.1730 -.1270

ANES 97-707 1A9 C2A + S3 + T9 CRIB TER FUSELAGE

(RECEIVED) (24 MAY 73)

## REFERENCE DATA

SREF =	2.4210 SQ.FT.	YMRP =	28.5300 INCHES
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.5300 SCALE		

WACH ( 1 ) = 1.555  
BETAT ( 1 ) = -7.123

## SECTION (1) CREITER FUSELAGE

DEPENDENT VARIABLE CP

[illegible]

### THE

[illegible]

## Index

0.000	-0.0130	.5360	.2440	.2330	-.0190	-.2630	-.01480	-.0320
40.000	.0560	-.1160	-.1300	-.0890	-.0740	-.0910	-.1030	-.0030
80.000		-.1090	-.1070	-.1320	-.0150	.0030	-.1120	-.1380
99.000				.1230	.1670	.0060	-.1240	-.1620
100.000				.6080	.1910	-.0530	-.1100	-.0560
20.000		-.1580		.2470	.1630	-.2150	-.1660	-.0800
35.000				.1150	.0760	-.0990	.0320	
50.000		-.1160	-.0180	.1480	.2490	.0760	.0870	
55.000		-.0710		.1800				
55.000		-.0980	-.0660	.1350				
90.000								

(RBOB03)

AVES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555		BETAT ( 2 ) = -5.070														
SECTION ( 1 ) ORBITER FUSELAGE																
		DEPENDENT VARIABLE CP														
X/LB	Y/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI	1.2920	1.2810	.5470	-.1650	-.1990	.0490				.0090		-.0360	-.1200	-.1200	-.0870	.0490
.0000			.7180	-.0160	-.1100	.0340				-.0630		-.0040				
20.000			.8560	.0990	.1630	-.0230				-.0980		.0050	-.0880	.0490	.0090	.0280
40.000			.8080	.2010	.2760	.1150				.0250		.1640	-.1120	-.1760	-.0630	-.0410
55.000			.6980	.2520	.2230	.1360				.0710		.0630	-.1540	-.1930	-.1120	-.0840
70.000			.5640	.1540	.2480	.1590				.2270		.0320	-.2260	-.2240	-.1930	-.1280
90.000		1.0590	.4040	.0920	.1980	.1870				.4120		-.0570				
120.000			.3110	-.0280	.1350	.5640				.5880		-.1900	-.2450	.0020	-.1910	-.1020
142.000									.8580							
150.000										.5180		-.3010	-.1730	-.2060	-.1690	-.0920
157.000										.3800						
162.000																
165.000																
169.000																
172.000																
180.000	1.2920	.7110	.1580	-.0250	.0700	.5390				.5890		-.3990	-.2640	-.2450	-.2480	-.2070
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						
PHI	.0000	.0020		.2080	.1790	-.0370	-.2760			-.0270		-.0180				
40.000		.0070	.4740	-.1410	-.2030	-.0930	-.0880	-.1040		-.1180		.0300				
70.000			-.1320	-.1410	-.2030	-.0930	-.0880	-.1040		-.1500						
90.000			-.1130	-.1020	-.1180	-.0340	-.0170	-.1250		-.1780						
105.000				.1160	.1330	-.0170	-.1380	-.1780		-.0800						
110.000										-.0670						
120.000		-.1350	-.1450	.5620	.1340	-.0820	-.1260	-.1440								
135.000			.2500	.1710	-.2180	-.1740	-.1320									
150.000		-.1020	.0040	.0680	.0700	-.0920	.0190	.0350								
165.000		-.0780	.0900	.0900	.2390	.0740	.0720	-.1020								
180.000		-.1190	-.0630	.1100												
MACH ( 1 ) = 1.555		BETAT ( 3 ) = -5.050														
SECTION ( 1 ) ORBITER FUSELAGE																
		DEPENDENT VARIABLE CP														
X/LB	Y/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI	1.4790	1.1990	.5050	-.1770	-.2160	.1120				.0190		-.0510	-.1280	-.1669	.1020	.0600
.0000			.6110	-.0670	-.1560	.0330				.0090		-.0230				
20.000			.7360	.0250	.0720	.0090				-.1000		.0020	-.0900	.0560	-.0090	.1130
40.000			.7450	.0980	.1800	.0920				.0120		.1170	-.1420	-.2100	-.0820	-.0530
55.000			.6580	.1480	.1300	.1210				.0340		.0430	-.1980	-.2220	-.1350	-.0880
70.000			.4960	.0460	.1550	.1510				.2240		.0390	-.2560	-.2400	-.2170	-.1090
90.000		1.0630	.3410	.0310	.1240	.1840				.4200		-.0590				





DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 Q2A + S3 + T9 ORBITER FUSELAGE (R8000-3)

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.115

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000	-.0410	-.0960	-.1310	-.0940	-.1130	-.1470	-.1870			
90.000	-.0360	-.0490	-.0910	-.0910	-.1210	-.1800	-.1810			
105.000			.0600	-.0310	-.1200	-.1960	-.2000			
110.000								-.0640		
120.000	.0310	-.0240	.2710	.0420	-.2070	-.1870	-.1710	-.1640		
135.000			.5610	.3310	-.1610	-.1480	-.1270			
150.000	-.0400	.0240	.2850	.2710	-.0990	-.0590	-.0190			
165.000	.0220		.3020	.3920	.0660	-.0000	-.1870			
180.000	-.0070	-.0630	.1340							

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.140

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.1175	.0188	.0339	.0602	.1355	.1506	.1591	.1732	.1958	.2259	.2711	.3000	.3953	.5120
PHI															
20.000	1.2340	1.0780	.5400	-.0760	-.0670	-.0520			-.1100		-.0570	-.1140	-.0830	-.0710	.0390
20.000	.4280	-.1500	-.1430	-.0660					-.1250		-.1210		-.0040	-.0030	-.0160
40.000	.0300	-.1100	-.1090	-.0890					-.1400		-.1560	-.1170	-.0040		
55.000	.0600	-.1610	-.2250	-.0510					-.0480		-.0670	-.0480			
70.000	.1650	-.2110	-.2450	.0920					.0990		-.0360	-.2460	-.2880	-.1570	-.0340
90.000	.6990	.0930	-.2560	-.2020	.1110				.1700		-.0790	-.0710	-.3080	-.1460	-.0270
120.000	.0520	-.2110	-.1550	.1930					.0540		-.163	-.0080	-.0800	-.0010	-.0370
142.000			-.1490	-.1040	.2710				.2860		-.3010	-.1320	.0000	-.1400	-.1010
150.000						.5140									
157.000									.2640		-.4450	-.3570	-.2340	-.1710	-.1570
162.000															
165.000									.3320						
169.000															
172.000					.7210										
180.000	1.2840	.7050	.1320	-.0460	.0880	.4380			.4950		-.3980	-.3210	-.4470	-.3300	-.2100

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.140

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.1175	.0188	.0339	.0602	.1355	.1506	.1591	.1732	.1958	.2259	.2711	.3000	.3953	.5120
PHI															
20.000	.0000	.0000	-.0460	-.1040	-.1490	-.1420			-.1260						
40.000	-.0100		-.1490	-.1320	-.1330	-.1430	-.1740								
70.000	-.1110	-.1490	-.1760	-.1320	-.1330	-.1430	-.1740								
90.000	-.0370	-.1110	-.0490	-.1310	-.1540	-.1790	-.1770								
105.000			.0190	-.0810	-.1560	-.2030	-.1990								
110.000								-.0990							
120.000	-.0350	-.0350	.2110	-.0650	-.2250	-.2080	-.1860	-.1670							
135.000			.5350	.3340	-.1910	-.1600	-.1410								
150.000	-.0690	-.0780	.1660	.0890	-.1650	-.1280	-.2090								



(RBOB/3)

AVES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.140

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8263	.8848	.9262	.9639	1.0015	1.0392
PHI										
155.000		-.0390	.2230	.3430	-.0040	-.0890	-.2390			
160.000		-.1260	-.1040	.0720						

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.300

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0672	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.0000	1.2630	.9930	.6660	.1540	.0490	.1180	.0280								
20.000		.6940	.2940	.1770	.0390	.0240									
40.000		.7840	.2930	.4260	.1180	.0230									
55.000		.7630	.3670	.5020	.2790	.1970									
70.000		.7410	.3670	.4350	.3070	.2180									
90.000		.1.1290	.6530	.2160	.4040	.2430									
120.000		.5220	.1190	.2110	.2890	.5450									
142.000		.4210	.0890	.1490	.3850	.6780									
150.000					.8100										
157.000						.6430									
162.000															
165.000															
169.000															
172.000						.7160									
180.000	1.2630	.7790	.2590	.0670	.0780	.4340	.6520								

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.300

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8263	.8848	.9262	.9639	1.0015	1.0392
PHI										
.0000	-.0440	.1150	.3440	.2570	.1940	-.0410				
40.000	.1260	-.0290	-.0390	-.0650	.0730	-.0290				
70.000		-.0290	-.0390	-.0650	.0730	-.0290				
90.000		-.0130	-.0400	-.0390	.0710	.0250				
109.000			.1670	.1960	.0490	-.0090				
111.000										
120.000		-.0940	-.1090	.6190	.2570	.0340				
123.000			.1130	.1470	-.1460	-.0410				
135.000										
150.000		-.0770	-.1660	.0390	-.1470	-.1820				
155.000		-.0470	.0590	.0990	.0220	.0920				
160.000		-.1790	-.1330	-.0920						

(R00003)

AVES 97-707 1A9 02A + S3 + T9 0751 TER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
0000	1.2840	.9750	.6410	.1550	.0339	.1760			.0660		.0350	-.0250	-.0770	-.0780	-.0370
20.000			.6750	.2720	.1330	.1580			.0670		-.0000	-.0170	-.0290	.0630	.0200
40.000			.7230	.2720	.3610	.1230			.0440		.0700				
55.000			.7250	.3260	.4400	.2400			.1520		.1530	-.0240	.0000	-.0100	.0290
70.000			.6950	.2450	.3590	.2620			.1910		.1920	-.0470	-.0160	-.0190	-.0110
90.000			.6170	.1810	.2270	.2750			.2180		.1900	-.0770	-.0120	-.0100	-.0130
120.000			.5110	.1470	.1800	.2650			.3040		.0800	-.0770	-.0120	-.0100	-.0130
140.000			.4280	.1030	.1330	.3190			.6770		-.0880	-.0940	.0000	-.0100	-.0110
150.000								.8310							
157.000									.6380		-.0300	-.0540	-.0220	-.0100	-.0100
162.000									.4970						
165.000					.7760						-.0200	-.0100	.0090	-.0200	-.0210
169.000									.6070						
172.000															
180.000	1.2940	.8230	.2810	.0730	.0950	.3750									
X/LB	.5873	.6626	.7380	.7869	.8283	.8248	.9262	.9639	1.0015	1.0392					

## PHI

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
0000															
20.000															
40.000															
55.000															
70.000															
90.000															
120.000															
140.000															
150.000															
155.000															
160.000															
165.000															
170.000															
175.000															
180.000															

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
0000	1.3180	.9820	.6240	.1540	.0550	.1980			.0950		.0660	-.0150	-.0540	-.0100	-.0460
20.000			.6420	.2470	.1190	.1730			.0750		.0450	-.0170	-.0270	.0690	.0620
40.000			.6750	.2470	.3040	.1650			.0660		.0500				
55.000			.6540	.2850	.3610	.2200			.1390		.1290	-.0470	-.0160	-.0880	-.0010
70.000			.6190	.1980	.2720	.2380			.1680		.1690	-.0680	-.0150	-.0100	-.0280
90.000			.5450	.1200	.1510	.2500			.1970		.0660	-.0930	-.0190	-.0120	-.0920
120.000			.4630	.0960	.1270	.2470			.5010						

AVES 97-70.7 1A9 02A + S3 + T9 ORBITER FUSELAGE

(RECORD)

MACH ( 2 ) = 2.500

SETAT ( 3 ) = -4.200

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0540					
150.000									.6580		-.0870	-.1080	.0000	-.1280	-.0980
157.000								.7880							
162.000									.6220						
165.000									.5190		-.1880	-.0710	-.0910	-.1170	-.0940
169.000															
172.000							.6630								
180.000	1.3180	.8410	.2820	.0760	.0930	.3690			.7140		-.2150	-.1810	-.1340	-.1550	-.1200
X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

## PHI

.000	.0680														
40.000	.0680	.0750	.2180	.1670	.0970	-.0670		-.0580							
70.000		-.0620	-.1020	-.1170	-.0900	-.0410	-.0850	-.0900							
90.000		-.0310	-.0920	-.0740	.0110	.0070	-.0420	-.0840							
105.000			.0590	.0990	.1180	.0070	-.0560	-.0910							
110.000								.0750							
120.000		-.0820	-.0760	.4280	.1630	-.0140	-.0520	-.0740	-.0240						
135.000			.2190	.2020	-.1220	-.1280	-.0980								
150.000		-.0510	-.0600	.0620	.0420	-.1080	-.0720	.0340							
165.000		-.0470		.0580	.1990	.0870	.0910	-.0350							
180.000		-.0840	-.0860	.1290											

MACH ( 2 ) = 2.000

SETAT ( 4 ) = 3.970

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3100	1.0130	.6430	.1590	.0070	.2240			.1060		.0740	-.0120	-.0600	-.1100	-.0450
20.000			.6340	.1820	-.0180	.2560			.1320		.0390				
40.000			.5790	.1840	.0370	.2190			.1170		-.0200	-.0500	-.0810	-.1340	.0050
55.000			.4960	.1850	.0660	.1340			.0940		.0390				
70.000			.4190	.0790	.0260	.0830			.1280		.0910	-.0920	-.1500	-.1900	-.1050
90.000		.8240	.3340	-.0210	.0140	.0660			.2170		.0680	-.1100	-.1580	-.1550	-.1150
120.000			.2940	-.0050	.0070	.0910			.1810		.0410	-.1310	-.1490	-.1410	-.1070
142.000										-.1130					
150.000			.3020	.0200	.0550	.2000		.5450	.4400		-.1570	-.0630	.0000	-.0770	-.0980
157.000															
162.000									.4670						
165.000											-.2290	-.1880	-.0650	-.0670	-.0980
169.000									.5110						
172.000							.6560								



TABULATED PRESSURE DATA - 1A9B

DATE 20 SEP 73

AVES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

(RE-0813)

MACH (2) = 2.000 BETAT (5) = 6.030

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP  
X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
70.000 -.0980 -.1210 -.1230 -.0900 -.0960 -.1280 -.1250  
90.000 -.0730 -.0970 -.0540 -.0870 -.0680 -.1100 -.1250  
105.000 -.0050 -.0480 -.0680 -.1110 -.1380  
110.000  
120.000 -.0610 -.0640 .1270 .0010 -.1380 -.1420 -.1190  
135.000 .4870 .3610 -.1390 -.1050 -.0660  
150.000 -.0990 -.0690 .1110 .1800 -.1250 -.0350 -.0850  
165.000 -.1230 .0770 .3420 -.0570 -.0010 -.0960  
180.000 -.1400 -.1630 -.0380

MACH (2) = 2.000 BETAT (6) = 8.080

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120  
PHI  
0.000 1.2790 .9810 .6230 .1250 .0400 .1210  
20.000 .5470 .0960 -.0450 .1340  
40.000 .4570 .0970 -.0740 .0890  
55.000 .3650 .0820 -.0590 -.0140  
70.000 .2720 .0540 -.0820 .0050  
90.000 .2000 .1070 .0870 .0230  
120.000 .1850 .0750 .0720 .0160  
142.000 .2210 .0220 .0420 .1290  
150.000  
157.000  
162.000  
165.000  
169.000  
172.000  
180.000 1.2790 .8040 .2540 .0570 .0820 .4160  
X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392  
PHI  
0.000 -.0360  
40.000 .0290  
70.000 -.1040  
90.000 -.0780  
105.000  
110.000  
120.000  
135.000  
150.000

PHI  
0.000 -.0910  
40.000 .0290  
70.000 -.1040  
90.000 -.0780  
105.000  
110.000  
120.000  
135.000  
150.000

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + 19 0601 100 0000 000

WACH ( 2 ) = 2.0000 SETA7 ( 5 ) = 8.580

SECTION / 1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7387	.7869	.8283	.8848	.9262	.9639	1.0019	1.1392
PMI										
165.0000		-.1560		-.0170	.1280	-.0540	-.0700	-.1500		
180.0000		-.1850		-.1750	-.1210					

01-01-78 CESSURE DATA - 1A09

REF ID: A67717 1A9 C2A + S3 + T9 CRIBTER FUSFLAGE

(Rev. 12-13-73)

### PARAMETRIC DATA

ALPHA =	4.0000	ORBIT =	.5000
RUDER =	.0000	ELEV =	.0000
PUSHL =	.0000		

## REFERENCE DATA

SREF =	2.4211	53.87	WGP =	28.5300	INCHES
LEF =	39.6491	INCHES	WGP =	.0000	INCHES
BTEF =	39.6491	INCHES	ZGP =	.0000	INCHES
SCALE =	.0001 SCALE				

BETAT ( ? ) = -7.0903

DEPENDENT VARIABLE CP

[illegible]

(R00014)

AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER FUSELAGE

X/LB	.0000	.0075	.0148	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PMI															
000	1.3210	1.1530	.5720	-.1370	-.1710	.0580			.0280		-.0450	-.1220	-.1270	-.1000	.0100
20.000		.6860	.0940	-.0940	.0430				-.0170		.0420	-.0610	.0400	-.0100	.0400
40.000		.7810	.0830	.1690	.0200				-.0800		.1780				
55.000		.7510	.1740	.2770	.1330				.0410		.0910	-.1130	-.1570	-.0670	-.1340
70.000		.6830	.2270	.2530	.1630				.0930		.0680	-.1140	-.1680	-.1030	-.0570
90.000		.5770	.1570	.2690	.1830				.2790		-.0170	-.2120	-.0960	-.0670	-.1040
120.000		.4390	.1140	.2290	.2280				.4290						
142.000									.6200		-.1670	-.2080	.0000	-.0600	-.0100
150.000		.3550	.0940	.1790	.6240			.8930							
157.000									.5440		-.2910	-.1520	-.1940	-.1440	-.1800
162.000									.4110						
165.000								.9460							
169.000									.6270		-.3420	-.0300	-.2250	-.2100	-.0600
172.000		.7650	.2080	.0140	.1120	.5980									
180.000	1.3210	.5873	.6626	.7381	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392				

X/LB															
PMI															
000															
40.000		.3410	.2000	.1740	-.0290	-.2720									
70.000		-.1190	-.1160	-.0570	-.0620	-.0880	-.1050								
90.000		-.1070	-.0330	-.0300	-.0280	-.1180	-.1260								
105.000			.1220	.1170	-.0260	-.1300	-.1540								
110.000		-.1040	-.1150	.4670	.1340	-.0790	-.1270								
120.000			.2970	.1920	-.1850	-.1410	-.0790								
135.000		-.0950	-.0230	.1840	.0540	.0290	.0490								
150.000		-.0730	.1170	.2610	.0830	.0870	-.0870								
160.000		-.1780	-.0920	.1270											

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.040

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER FUSELAGE

X/LB	.0000	.0075	.0148	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PMI															
000	1.3320	1.2420	.5460	-.1590	-.2050	.0690			.0670		-.0840	-.1160	-.1590	.0190	.0330
20.000		.6540	-.0390	-.1230	.0440				.0190		.0340	-.1070	.0400	-.0160	.0740
40.000		.7210	.0480	.1150	.0410				-.0800		.0540				
55.000		.6680	.1070	.2000	.1110				.0240		.0350	-.1090	-.1930	-.0830	-.0800
70.000		.6010	.1370	.1720	.1430				.1160		.0350	-.1070	-.2010	-.1270	-.0730
90.000		.5040	.0780	.1850	.1750				.2650		-.0170	-.2260	-.2010	-.1270	-.0730
120.000		.3930	.0780	.1590	.2730				.3920		-.0250	-.2580	-.2440	-.1690	-.0830







DATE 21 SEP 73

INSULATED PRESSURE DATA - 1A95

(R50814)

AVES 97-717 1A9 C2A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.180

SECTION ( 1 ) ORBITER FUSELAGE  
DEPENDENT VARIABLE CP  
X/LB .5873 .6826 .7380 .7869 .8283 .8848 .9262 .9639 1.1015 1.1092

PHI  
70.000 -.0030 -.0070 -.1590 -.0590 -.0920 -.1300 -.1670  
90.000 -.0030 -.0370 -.0280 -.0750 -.1040 -.1560 -.1660  
105.000 .0020 -.0220 -.0920 -.1050 -.1800 -.1750  
110.000 .0320 .0010 .2700 -.0210 -.2110 -.1890 -.1630  
120.000 .5780 .3600 -.1550 -.1460 -.1350  
135.000 .0050 -.0240 .2880 .3080 -.0790 -.0960  
150.000 -.0110 .3260 .0040 .0760 .0110 -.1690  
165.000 -.1320 -.0880 .1220

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.100

SECTION ( 1 ) ORBITER FUSELAGE  
DEPENDENT VARIABLE CP  
X/LB .0020 .0075 .0188 .0339 .0612 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3270 .3953 .5120

PHI  
20.000 1.2930 1.0350 .5010 -.0550 .0190 -.0580  
40.000 .4130 -.1250 -.0470 -.0850  
60.000 .3280 -.1260 -.1640 -.1060  
80.000 .2470 -.1410 -.2000 -.0390  
100.000 .1640 -.2150 -.2250 .0770  
120.000 .1160 -.2510 -.2180 .1240  
140.000 .0870 -.1940 -.1460 .2110  
160.000 .1330 -.1160 -.0190 .3060  
180.000 .7610 .1830 -.0020 .1150 .5010  
200.000 .6826 .7380 .7869 .8283 .8848 .9262 .9639 1.1015 1.1092

PHI  
40.000 -.0040 -.0560 -.1270 -.1380 -.1570  
60.000 -.0940 -.1340 -.1530 -.1130 -.1280 -.1160  
80.000 -.0900 -.1000 -.0290 -.1140 -.1480 -.1620  
100.000 .0350 -.1680 -.1480 -.1710  
120.000 -.0270 -.0560 .1900 -.0690 -.2510 -.1970  
140.000 .6310 .3390 .1660 -.1820  
160.000 -.0630 -.0640 .1730 .0510 -.1740  
180.000 .5180 .2840 .3620 .5330 .0950  
200.000 -.0460 -.1630





AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000

BETAT ( 3 ) = -4.200

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .0075 .0100 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

142.0000 .4500 .1040 .1400 .4100 .8020 .6900 .0790 -.0480 -.0940 .0000 -.0000 -.0000 -.0000

150.0000

157.0000

162.0000

165.0000

159.0000

172.0000

180.0000

1.3570 .9220 .3280 .1110 .1240 .4050 .7260

X/LB

.5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.0800 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380

110.0000

120.0000

135.0000

150.0000

165.0000

180.0000

MACH ( 2 ) = 2.000

BETAT ( 4 ) = 3.950

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .0075 .0100 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

.0800 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380

110.0000

120.0000

135.0000

150.0000

165.0000

180.0000

MACH ( 2 ) = 2.000

BETAT ( 4 ) = 3.950

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .0075 .0100 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

.0800 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380

110.0000

120.0000

135.0000

150.0000

165.0000

180.0000

MACH ( 2 ) = 2.000

BETAT ( 4 ) = 3.950

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .0075 .0100 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

.0800 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380 .0380

110.0000

120.0000

135.0000

150.0000

165.0000

180.0000



DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-757 1A0 C2A + S3 + T9 ORBITER FUSELAGE

(RDT-14)

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.990

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

70.000 -.0890 -.1120 -.1170 -.0880 -.0850 -.1040 -.1180  
90.000 -.0670 -.0920 -.0430 -.0820 -.0680 -.1070 -.1220  
105.000 .0030 -.0500 -.0030 -.0670 -.1170 -.1350  
110.000 .0030 .1360 .0240 -.1400 -.1410 -.1270  
120.000 .0030 .3360 .3360 -.1410 -.1060 -.0820  
135.000 .0030 .1790 .1510 -.0880 -.0720 -.0860  
150.000 .0030 .0760 .3130 -.0490 -.0130 -.0980  
165.000 .0030 .1460 .0310  
180.000

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.000

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1516 .1581 .1732 .1958 .2259 .2711 .3240 .3953 .5120

PHI

70.000 1.3190 .9890 .5860 .1140 .0170 .1380  
90.000 .5330 .0490 -.0540 .1490  
105.000 .4530 .0950 -.0670 .0920  
110.000 .3500 .0810 -.0520 -.0430  
120.000 .2760 .0370 -.0710 .0190  
135.000 .7180 .2140 .1120 -.0780 .0110  
150.000 .2130 .0590 .0580 .0130  
165.000 .2630 .0030 .0310 .2220  
180.000 .0070 .0060 .1200 .4250  
195.000 1.3190 .8670 .2980 .0860 .1200 .4250 .7320  
210.000 .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

70.000 -.0380  
90.000 -.0340 .0130  
105.000 -.0950 -.1150 .1230 -.0910 .0690 -.1110 .0750  
120.000 .0030 .0750 .0410 .0740 .0860 .1240 .1310  
135.000 .0030 .0030 .0500 .0860 .1400 .1390  
150.000 .0030 .1540 .0490 .1580 .1450 .1180  
165.000 .0030 .4970 .2640 .0750 .0970 .1970  
180.000 .0030 .1250 .1550 .0780 .0210 .1170 .1180 .1470  
195.000 .0030 .1310  
210.000 .0030 .1190



(R00014)

DATE 20 SEP 73  
 CALCULATED PRESSURE DATA - 1A9B  
 AMCS 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

WACH ( 2 ) = 2.1000		SECT ( 6 ) = 8.030	
SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CF	
X/LB	.5873 .6626 .7390 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392		
PMI			
165.000	-.1450	-.0000	.30
180.000	-.1780	-.1730	-.0110
		-.0000	-.0910
			-.1520



(RBOCUS)

AMES 97-707 1A9 OCA + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB	PHI	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI																
0.000	1.3560	1.0590	.5280	-.1070	-.0960	.0380				.0700		-.0900	-.1070	-.1320	-.0930	-.0140
20.000			.6070	.0260	-.0190	.0290				-.0180		-.0870	-.0700	.0640	-.0170	.0070
40.000			.7100	.0240	.2020	.0490				-.0810		-.0700	-.0240	.0640		
55.000			.7250	.1510	.3020	.1640				.0630		.0780	-.1550	-.1410	-.0500	-.0240
70.000			.6840	.2070	.2780	.1940				.1430		.0750	-.1880	-.1930	-.0760	-.0480
90.000	1.1080		.5890	.1570	.2720	.2210				.3140		.0130	-.1960	-.1950	-.1360	-.0810
120.000			.4750	.1180	.2510	.2750				.4520		-.0680				
142.000					.2100	.6780				.6520		-.1420	-.2050	.0400	-.0690	-.0810
150.000			.4010	.0350					.9290							
157.000										.5730		-.2860	-.1280	-.1680	-.1530	-.0780
162.000										.4490						
165.000								.9850								
169.000										.6670		-.3690	-.2140	-.2110	-.1910	-.1980
172.000																
180.000	1.3560	.8210	.2520	.0530	.1480	.6490										
X/LB	.5673	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						

PHI

-.0310  
-.0190

140	-.0640															
40.000	.0130	.2690	.2080	.1700	-.0310	-.2710										
70.000		-.1090	-.1610	-.0420	-.0290	-.0710										
90.000		-.0670	.0260	.0210	-.0260	-.0940										
105.000			.1310	.1000	-.0270	-.1230										
110.000				.1390	-.0800	-.1040										
120.000	-.0750	-.0980	.4470	.3290	.2310	-.1630	-.1140	.0250								
135.000				.1190	.1300	-.0670	.0660	.0750								
150.000	-.0850	-.0790	.1190	.1300	-.0670	.0660	.0750									
165.000	-.0600	.1590	.2870	.1110	.1190	-.0680										
180.000	-.1860	-.1230	.0960													

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB	PHI	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI																
0.000	1.3560	1.0730	.5400	-.1020	-.1170	.0530				.0460		-.0660	-.1430	-.1420	.0300	.0160
20.000			.5780	.0000	-.0670	.0360				.0210		-.0730	-.0290	-.0030	-.0330	.0340
40.000			.6440	.0070	.1390	.0550				-.0680		.0560				
55.000			.6480	.0960	.2190	.1460				.0460		.0490	-.1770	-.2170	-.0730	-.0530
70.000			.6040	.1360	.2000	.1780				.1710		.0430	-.2150	-.2250	-.0990	-.0610
90.000	1.0510		.5220	.0840	.1790	.2190				.3060		.0140	-.2200	-.2220	-.1790	-.0640
120.000			.4310	.0850	.1880	.3290				.3940						





DATE 20 SEP 73

## TABULATED PRESSURE DATA - 1A9B

(RB-803)

AVES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.070

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PMI

70.000 -.0190 -.0690 -.0910 -.0380 -.0600 -.1090 -.1540  
 90.000 .0020 -.0190 .0540 -.0430 -.0810 -.1370 -.1480  
 105.000 .1160 -.0090 -.0800 -.1590 -.1580  
 110.000 .0290 .0210 .2590 -.0100 -.2070 -.1770 -.1550  
 120.000 .0430 .3770 -.1460 -.1410 -.1400  
 135.000 -.0310 -.0170 .2850 .3460 -.0270 -.0430 -.0790  
 150.000 -.0480 .3420 .4880 .1170 .0360 -.1550  
 165.000 -.2020 -.0630 .1040

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.090

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .0000 .0073 .0188 .0339 .0612 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PMI

0.000 1.3070 1.0050 .4890 -.0550 .1100 -.0610  
 20.000 .3930 -.1070 .0650 -.0960  
 40.000 .3160 -.1060 -.1450 -.1220  
 55.000 .2420 -.1330 -.1860 -.0180  
 70.000 .1650 -.1880 -.2130 .0770  
 90.000 .6560 .1130 -.2410 -.2060 .1330  
 105.000 .1160 -.1760 -.1280 .2790  
 120.000 .1760 -.0810 .0150 .3360  
 135.000 .5330  
 150.000 .3120  
 165.000 .3940  
 180.000 .5770  
 1.3070 .8130 .2320 .0400 .1640 .5650  
 .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PMI

0.000 -.0610  
 40.000 -.0860  
 70.000 -.0780 -.1150 -.1380 -.0890 -.1120 -.1040 -.1400  
 90.000 -.0430 -.0750 .0480 -.0590 -.1380 -.2140 -.1520  
 105.000 .1780 -.0540 .1780 -.0550 -.2530 -.2210 -.1660  
 120.000 .0160 -.0540 .6990 .3410 -.1640 -.1850 -.1950  
 135.000 -.0840 -.1000 .1300 .0650 -.1100 -.1180 -.1940  
 150.000









DATE 20 SEP 73

## TABULATED PRESSURE DATA - 1A98

(RBOB05)

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.940

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1561 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI 180.000 1.3640 .9420 .3620 .1190 .1640 .4470 .3110 .1870 .1340 .1050 .1060 .10970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI .0000 .0520 .0450 .0680 .0910 .0770 .0210 .0230 .0230 .0330 .0450 .0780 .1060

40.000 .0450 .0680 .0910 .0770 .0210 .0230 .0230 .0330 .0450 .0780 .1060

70.000 .0680 .0910 .0770 .0210 .0230 .0230 .0330 .0450 .0780 .1060

90.000 .0910 .0770 .0210 .0230 .0230 .0330 .0450 .0780 .1060

110.000 .0770 .0210 .0230 .0230 .0330 .0450 .0780 .1060

130.000 .0210 .0230 .0230 .0330 .0450 .0780 .1060

150.000 .0230 .0330 .0450 .0780 .1060

165.000 .0330 .0450 .0780 .1060

180.000 .0450 .0780 .1060

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.980

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1561 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI .000 1.3750 1.0040 .6110 .1050 .0190 .1950 .0890 .0720 .0140 .0380 .0800 .0330

20.000 .0430 .0990 .0510 .2150 .0910 .0650 .0650 .0650 .0650 .0650 .0650 .0650

40.000 .0690 .0980 .0290 .1450 .0820 .0820 .0820 .0820 .0820 .0820 .0820 .0820

55.000 .0930 .0890 .0790 .0450 .1200 .1200 .1200 .1200 .1200 .1200 .1200 .1200

70.000 .3210 .0030 .0330 .0350 .1720 .1720 .1720 .1720 .1720 .1720 .1720 .1720

90.000 .2760 .0690 .0500 .0240 .1970 .1970 .1970 .1970 .1970 .1970 .1970 .1970

120.000 .2920 .0130 .0180 .0270 .1520 .1520 .1520 .1520 .1520 .1520 .1520 .1520

142.000 .3390 .0510 .0810 .3180 .4260 .4260 .4260 .4260 .4260 .4260 .4260 .4260

150.000 .3390 .0510 .0810 .3180 .4260 .4260 .4260 .4260 .4260 .4260 .4260 .4260

157.000 .3390 .0510 .0810 .3180 .4260 .4260 .4260 .4260 .4260 .4260 .4260 .4260

162.000 .3390 .0510 .0810 .3180 .4260 .4260 .4260 .4260 .4260 .4260 .4260 .4260

165.000 .3390 .0510 .0810 .3180 .4260 .4260 .4260 .4260 .4260 .4260 .4260 .4260

169.000 .3390 .0510 .0810 .3180 .4260 .4260 .4260 .4260 .4260 .4260 .4260 .4260

172.000 1.3750 .9460 .3550 .1320 .1600 .4800 .5130 .2260 .1940 .1290 .1590 .1870 .1180

180.000 .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI .0000 .0720 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170

40.000 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170



AMES 97-707 1A9 02A + S3 + 79 ORBITER FUSELAGE

BETAT ( 6 ) = 8.520

**MACH (2) = 2.500**

BETAT ( 6 ) = 8.520

**SECTION (1) ORBITER FUSELAGE**

**DEPENDENT VARIABLE CP**

	.6677	.6628	.7190	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
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## III

591

- 22 -

6240-0770-1530

1995-1996

-0550

(RBCB06) ( 24 MAY 73 )

JAMES 97-717 IA9 C2A + S3 + T9 ORBITER FUSELAGE

### PARAMETRIC DATA

ALPHAT =	.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

## REFE PRICE DATE

SREF =	2.4215 SQ.FT.	YMRP =	28.5300 INCHES
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.0300 SCALE		

MACH ( 1 ) = 1.555

BETAT ( 1 ) = -7.100

INDEPENDENT VARIABLE	DEPENDENT VARIABLE CP
AGE	
SEX	
RELIGION	
EDUCATION	
INCOME	
ETHNICITY	
RESIDENCE	
EMPLOYMENT	
HEALTH	
CRIMINAL RECORD	
PSYCHOLOGICAL	
PERSONALITY	
ATTITUDE	
VALUES	
INTERESTS	
HOBBIES	
TRAVEL	
DIET	
EXERCISE	
SLEEP	
STRESS	
ADAPTATION	
RESILIENCE	
PERFORMANCE	
TECHNICAL SKILLS	
PROBLEM SOLVING	
DECISION MAKING	
LEADERSHIP	
TEAMWORK	
COMMUNICATION	
EMOTIONAL STABILITY	
SELF-ESTEEM	
CONFIDENCE	
ASSERTIVENESS	
EMPATHY	
EMOTIONAL INTELLIGENCE	
ADAPTABILITY	
RESILIENCE	
PERFORMANCE	
TECHNICAL SKILLS	
PROBLEM SOLVING	
DECISION MAKING	
LEADERSHIP	
TEAMWORK	
COMMUNICATION	
EMOTIONAL STABILITY	
SELF-ESTEEM	
CONFIDENCE	
ASSERTIVENESS	
EMPATHY	
EMOTIONAL INTELLIGENCE	
ADAPTABILITY	
RESILIENCE	
PERFORMANCE	
TECHNICAL SKILLS	
PROBLEM SOLVING	
DECISION MAKING	
LEADERSHIP	
TEAMWORK	
COMMUNICATION	
EMOTIONAL STABILITY	
SELF-ESTEEM	
CONFIDENCE	
ASSERTIVENESS	
EMPATHY	
EMOTIONAL INTELLIGENCE	
ADAPTABILITY	
RESILIENCE	
PERFORMANCE	
TECHNICAL SKILLS	
PROBLEM SOLVING	
DECISION MAKING	
LEADERSHIP	
TEAMWORK	
COMMUNICATION	
EMOTIONAL STABILITY	
SELF-ESTEEM	
CONFIDENCE	
ASSERTIVENESS	
EMPATHY	
EMOTIONAL INTELLIGENCE	
ADAPTABILITY	
RESILIENCE	
PERFORMANCE	
TECHNICAL SKILLS	
PROBLEM SOLVING	
DECISION MAKING	
LEADERSHIP	
TEAMWORK	
COMMUNICATION	
EMOTIONAL STABILITY	
SELF-ESTEEM	
CONFIDENCE	
ASSERTIVENESS	
EMPATHY	
EMOTIONAL INTELLIGENCE	
ADAPTABILITY	
RESILIENCE	
PERFORMANCE	
TECHNICAL SKILLS	
PROBLEM SOLVING	
DECISION MAKING	
LEADERSHIP	
TEAMWORK	
COMMUNICATION	
EMOTIONAL STABILITY	
SELF-ESTEEM	
CONFIDENCE	
ASSERTIVENESS	
EMPATHY	
EMOTIONAL INTELLIGENCE	
ADAPTABILITY	
RESILIENCE	
PERFORMANCE	
TECHNICAL SKILLS	
PROBLEM SOLVING	
DECISION MAKING	
LEADERSHIP	
TEAMWORK	
COMMUNICATION	
EMOTIONAL STABILITY	
SELF-ESTEEM	
CONFIDENCE	
ASSERTIVENESS	
EMPATHY	
EMOTIONAL INTELLIGENCE	
ADAPTABILITY	
RESILIENCE	
PERFORMANCE	
TECHNICAL SKILLS	
PROBLEM SOLVING	
DECISION MAKING	
LEADERSHIP	
TEAMWORK	
COMMUNICATION	
EMOTIONAL STABILITY	
SELF-ESTEEM	
CONFIDENCE	
ASSERTIVENESS	
EMPATHY	
EMOTIONAL INTELLIGENCE	
ADAPTABILITY	
RESILIENCE	
PERFORMANCE	
TECHNICAL SKILLS	
PROBLEM SOLVING	
DECISION MAKING	
LEADERSHIP	
TEAMWORK	
COMMUNICATION	
EMOTIONAL STABILITY	
SELF-ESTEEM	
CONFIDENCE	
ASSERTIVENESS	
EMPATHY	
EMOTIONAL INTELLIGENCE	
ADAPTABILITY	
RESILIENCE	
PERFORMANCE	
TECHNICAL SKILLS	
PROBLEM SOLVING	
DECISION MAKING	
LEADERSHIP	
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EMOTIONAL STABILITY	
SELF-ESTEEM	
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EMOTIONAL INTELLIGENCE	
ADAPTABILITY	
RESILIENCE	
PERFORMANCE	
TECHNICAL SKILLS	
PROBLEM SOLVING	
DECISION MAKING	
LEADERSHIP	
TEAMWORK	
COMMUNICATION	
EMOTIONAL STABILITY	
SELF-ESTEEM	
CONFIDENCE	
ASSERTIVENESS	
EMPATHY	
EMOTIONAL INTELLIGENCE	
ADAPTABILITY	
RESILIENCE	

SECTION ( DORETHER FUSILLAGE															
N/LB	.00740	.00775	.01100	.0339	.0602	.1355	.1516	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5125
FMI															
.000	1.3575	1.0110	.4965	-.0820	.0245	.0010			-.0390		-.0690	-.1270	-.1430	-.0630	-.0570
20.000			.5880	.0420	.0790	.0060			-.0630		-.0690		.0680	.0130	.0095
40.000			.7410	.1390	.2780	.0570			-.0920			-.1160			
55.000			.7850	.2350	.3910	.2060			.1100		.1230	-.1210	-.1780	.0300	.0200
70.000			.7600	.2870	.3740	.2460			.2290		.1130	-.1570	-.1590	-.0740	.0040
90.000	1.1790		.6760	.2590	.3700	.2770			.3690		.0490	-.1740	-.1520	-.1270	-.0370
120.000			.5580	.2010	.3470	.3540			.5220	.0220					
142.000			.4650	.1020	.2870	.7390			.7020		-.1130	-.1610	.0000	-.1440	-.0420
150.000								.9790							
157.000									.6230		-.2240	-.0860	-.1390	-.1230	-.0310
162.000									.4650						
165.000															
169.000							1.0900		.6670						
172.000				.0890	.1910	.6550					-.3610	-.2450	-.1840	-.2190	-.1350
180.000	1.3570	.8570	.2930												
										1.0392					

FMI	-0.1183	-0.0820	-0.0415
0.000			
40.000	0.0110		-0.1150
70.000	-0.0980		
90.000	-0.0690		
105.000			
110.000			-0.0070
120.000	-0.0370	-0.0690	0.0550
135.000			
150.000	-0.0580	-0.0640	
165.000	-0.0320		
180.000	-0.2450	-0.0580	
190.000			
200.000			
210.000			
220.000			
230.000			
240.000			
250.000			
260.000			
270.000			
280.000			
290.000			
300.000			
310.000			
320.000			
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410.000			
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430.000			
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450.000			
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640.000			
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660.000			
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680.000			
690.000			
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710.000			
720.000			
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860.000			
870.000			
880.000			
890.000			
900.000			
910.000			
920.000			
930.000			
940.000			
950.000			
960.000			
970.000			
980.000			
990.000			
1000.000			

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98  
ANES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

(RBOB06)

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.080

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP														
X/LB		.0000	.0075	.0148	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5121
PHI																
.000	1.3850	1.0370	.5190	-.1020	-.0450	.0330				.0050		-.0780	-.1240	-.1050	.0270	-.0510
20.000			.5770	.0070	.0370	.0280				-.0130		-.0760				
40.000			.6860	.0590	.2020	.0540				-.0710		-.0600	-.1160	.0710	-.0110	.0220
55.000			.7110	.1290	.3010	.1860				.0850		.0940				
70.000			.6810	.1840	.2870	.2230				.2040		.0870	-.1450	-.2050	-.0190	.0420
95.000		1.1240	.6010	.1680	.2780	.2520				.3400		.0790	-.1800	-.1880	-.0530	-.0190
120.000			.5160	.1250	.2770	.3570				.4800		.0380	-.1910	-.1700	-.1550	-.0410
142.000										-.0680						
150.000			.4490	.0820	.2480	.7330			.9700	.6860		-.1190	-.1820	.0200	-.1670	-.0550
157.000										.6100						
162.000										.4920		-.2860	-.1070	-.1370	-.1340	-.0550
165.000																
169.000																
172.000								1.0110		.7150						
180.000	1.3850	.8790	.3030	.0960	.1890	.7280										

PHI  
40.000  
70.000  
95.000  
105.000  
110.000  
120.000  
135.000  
150.000  
165.000  
180.000

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.060

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP														
X/LB		.0000	.0075	.0148	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI																
.000	1.3920	1.0380	.5110	-.1190	-.0950	.0380				.0470		-.0700	-.1260	-.1430	.0390	-.0130
20.000			.5400	-.0260	-.0200	.0350				.0330		-.0670				
40.000			.6200	.0170	.1420	.0620				-.0400		-.0490	-.1040	.0430	-.0370	.0290
55.000			.6340	.0690	.2210	.1670				.0690		.0760				
70.000			.6020	.1000	.2010	.2020				.2110		.0600	-.1680	-.2370	-.0560	-.0370
95.000		1.0660	.5300	.0770	.1860	.2330				.3360		.0460	-.2060	-.2150	-.1070	-.0340
120.000			.4600	.0780	.2110	.3720				.4370		.0260	-.2070	-.2010	-.1650	-.1330







DATE 20 SEP 73

TABULATED PRESSURE DATA - 1ABD

(8026 16)

ANCS 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.060

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .3873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

70.000 -.0210 -.0440 -.0460 .0090 -.0400 -.0980 -.1370  
 90.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.1300  
 105.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.1410  
 110.000 .0280 .0230 .2310 .0080 -.2030 -.1540 -.1390  
 120.000 .0280 .0230 .2310 .0080 -.2030 -.1540 -.1480  
 135.000 .0080 .0030 .2310 .0080 -.2030 -.1540 -.1670  
 150.000 .0080 .0030 .2310 .0080 -.2030 -.1540 -.1860  
 165.000 .0080 .0030 .2310 .0080 -.2030 -.1540 -.2050  
 180.000 .0080 .0030 .2310 .0080 -.2030 -.1540 -.2240

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.090

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

20.000 1.3360 .9860 .4750 -.0360 .1500 -.0540  
 40.000 .3840 -.0970 .1140 -.0840  
 60.000 .3030 -.0990 -.0990 -.1240  
 80.000 .2360 -.1220 -.1720 .0050  
 100.000 .1630 -.1930 -.2020 .0880  
 120.000 .1190 -.2360 -.1980 .1530  
 140.000 .1420 -.1860 -.1050 .1960  
 160.000 .2200 -.1480 .0490 .3670  
 180.000 .2770 .0770 .2180 .6240  
 200.000 .8640 .2770 .0770 .2180 .6240  
 220.000 .8640 .2770 .0770 .2180 .6240  
 240.000 .8640 .2770 .0770 .2180 .6240  
 260.000 .8640 .2770 .0770 .2180 .6240  
 280.000 .8640 .2770 .0770 .2180 .6240  
 300.000 .8640 .2770 .0770 .2180 .6240  
 320.000 .8640 .2770 .0770 .2180 .6240  
 340.000 .8640 .2770 .0770 .2180 .6240  
 360.000 .8640 .2770 .0770 .2180 .6240  
 380.000 .8640 .2770 .0770 .2180 .6240  
 400.000 .8640 .2770 .0770 .2180 .6240  
 420.000 .8640 .2770 .0770 .2180 .6240  
 440.000 .8640 .2770 .0770 .2180 .6240  
 460.000 .8640 .2770 .0770 .2180 .6240  
 480.000 .8640 .2770 .0770 .2180 .6240  
 500.000 .8640 .2770 .0770 .2180 .6240  
 520.000 .8640 .2770 .0770 .2180 .6240  
 540.000 .8640 .2770 .0770 .2180 .6240  
 560.000 .8640 .2770 .0770 .2180 .6240  
 580.000 .8640 .2770 .0770 .2180 .6240  
 600.000 .8640 .2770 .0770 .2180 .6240  
 620.000 .8640 .2770 .0770 .2180 .6240  
 640.000 .8640 .2770 .0770 .2180 .6240  
 660.000 .8640 .2770 .0770 .2180 .6240  
 680.000 .8640 .2770 .0770 .2180 .6240  
 700.000 .8640 .2770 .0770 .2180 .6240  
 720.000 .8640 .2770 .0770 .2180 .6240  
 740.000 .8640 .2770 .0770 .2180 .6240  
 760.000 .8640 .2770 .0770 .2180 .6240  
 780.000 .8640 .2770 .0770 .2180 .6240  
 800.000 .8640 .2770 .0770 .2180 .6240  
 820.000 .8640 .2770 .0770 .2180 .6240  
 840.000 .8640 .2770 .0770 .2180 .6240  
 860.000 .8640 .2770 .0770 .2180 .6240  
 880.000 .8640 .2770 .0770 .2180 .6240  
 900.000 .8640 .2770 .0770 .2180 .6240  
 920.000 .8640 .2770 .0770 .2180 .6240  
 940.000 .8640 .2770 .0770 .2180 .6240  
 960.000 .8640 .2770 .0770 .2180 .6240  
 980.000 .8640 .2770 .0770 .2180 .6240  
 1000.000 .8640 .2770 .0770 .2180 .6240

PHI

40.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.1300  
 60.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.1410  
 80.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.1540  
 100.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.1670  
 120.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.1800  
 140.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.1930  
 160.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.2060  
 180.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.2190  
 200.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.2320  
 220.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.2450  
 240.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.2580  
 260.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.2710  
 280.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.2840  
 300.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.2970  
 320.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.3100  
 340.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.3230  
 360.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.3360  
 380.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.3490  
 400.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.3620  
 420.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.3750  
 440.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.3880  
 460.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.4010  
 480.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.4140  
 500.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.4270  
 520.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.4400  
 540.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.4530  
 560.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.4660  
 580.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.4790  
 600.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.4920  
 620.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.5050  
 640.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.5180  
 660.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.5310  
 680.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.5440  
 700.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.5570  
 720.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.5700  
 740.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.5830  
 760.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.5960  
 780.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.6090  
 800.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.6220  
 820.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.6350  
 840.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.6480  
 860.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.6610  
 880.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.6740  
 900.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.6870  
 920.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.7000  
 940.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.7130  
 960.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.7260  
 980.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.7390  
 1000.000 .0040 .0030 .0730 -.0040 -.0620 -.1240 -.7520

AMES 97-717 IAS 024 - S3 - T9 ORBITER FUSELAGE

(R00016)

MACH (1) = 1.555 BETAT (6) = 9.190

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

## PHI

165.000 -1.120 .1920 .3890 .0390 .0860 .02380  
180.000 -2.040 -1.1300 .0790

MACH (2) = 2.000 BETAT (1) = -8.290

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

## PHI

1.3870 .9010 .4280 .0870 .0190 .1510 .0520 .0180 .01290 .01660 .01670 .01090  
 20.000 .4870 .1460 .2320 .1710 .0770 .0180  
 40.000 .6400 .1420 .4950 .2040 .0900 .0320 .0140 .01290 .01290 .01070  
 55.000 .7080 .1740 .5880 .3550 .2820 .2690 .0430 .0440 .0200 .0650  
 70.000 .7320 .1930 .3480 .3800 .3230 .2690 .0160 .0380 .01220 .0230  
 90.000 1.2150 .7090 .2230 .2540 .3980 .4070 .0130 .0130 .01620 .0410 .0320  
 120.000 .6530 .2420 .2410 .4120 .7010 .1840  
 150.000 .5710 .1990 .2410 .5410 .8610 .0130 .01240 .01200 .0460 .0580  
 157.000 1.0330 .8090  
 162.000 .6480  
 165.000 .9350  
 169.000 .8410  
 172.000 .8410  
 180.000 1.0015 1.0392

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

## PHI

100.000 -0.480  
 110.000 .1140  
 120.000 .0690 .2290 .1490 .0700 .0560 .01360  
 130.000 -0.0100 .0510 .0130 .0340 .0140 .0110  
 140.000 .0180 .0120 .0260 .0090 .0770 .0240 .0160  
 150.000 .105.000 .1340 .1910 .0770 .0200 .01240  
 160.000 .110.000 .10200 .0380 .5110 .2660 .0540 .0130 .0140 .1280  
 170.000 .135.000 .3040 .2880 .0840 .0830 .01660 .0380  
 180.000 .150.000 .0290 .01240 .0700 .0810 .01340 .0350 .0440  
 185.000 .165.000 .10400 .1120 .2610 .1410 .1810 .0690  
 190.000 .180.000 .1120 .1390 .0130

(RBOB:j6)

100-27-787 1A9 02A + S3 + T9 CRIB TER FUSELAGE

BETAT ( 2 ) = -6.2511

### SECTION 11 ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	0.000	0.075	0.168	0.339	0.612	1.155	1.500	1.891
PHI	1.4120	.9340	.5230	.1060	.0260	.1740	.0790	.0690
21.000			.5430	.1420	.1200	.1830	.0860	.0590
40.000			.6290	.1460	.3450	.2190	.0900	.0210
55.000			.6590	.1670	.4190	.3390	.2450	.1700
70.000			.6640	.1670	.2160	.3630	.2850	.2390
90.000	1.1540		.6320	.1660	.1890	.3790	.3740	.2510
120.000		.5920	.1670	.2160	.3800	.6180	.1230	.1760
142.000		.5410	.1670	.2370	.4560	.8280	-.0010	-.0470
150.000						.9960		
157.000						.7810		-.1190
162.000						.6610		.0010
165.000								-.0210
169.000								-.0640
172.000								-.0610
180.000	1.4120	.9690	.4000	.1670	.2030	.5230	.9140	-.1190
							.8710	-.1820
								-.1400
								-.0850
								-.1770
								-.0900
X/LB	.5973	.6826	.7380	.7869	.8283	.8848	.9639	1.0392

SECTION / ORBITER FUSELAGE

DEPENDENT VARIABLE CP

[illegible]



(RBC806)

AVES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.950

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

180.000 1.3950 .9990 .3980 .1700 .1980 .4490 .8540 .51760 -.1380 -.0890 -.1140 -.1320

X/LB

.5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.0000 -.0180 .0150 -.1230 -.1380 -.0800 -.1490 -.1260 -.0890

40.000 -.0160 .0150 -.1230 -.1380 -.0800 -.1490 -.1260 -.0890

70.000 -.0820 -.0570 -.0700 -.0900 -.0900 -.0900 -.0900 -.0900

90.000 -.0680 -.0580 -.0580 -.0580 -.0580 -.0580 -.0580 -.0580

105.000 .0310 -.0130 -.0520 -.1030 -.1040 .0540

110.000 .1580 -.0130 -.1190 -.1150 -.0750 -.0450

120.000 .5630 .3500 -.1130 -.0960 -.0540

135.000 .1540 .4170 .0310 .0420 -.0270

150.000 -.0670 -.0590 .4170 .0970 .0330 -.0490

165.000 -.0670 .1650 .4170 .0970 .0330 -.0490

180.000 -.0650 -.0750 .0750

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.980

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

.0000 1.3870 .9380 .5340 .1020 -.0210 .1830 .0780 .0630 .0630 -.0410 -.0660 -.0350

20.000 .4860 .0940 -.0340 .1890 .0780 .0570 .0970 -.0400 -.0860 -.1270 -.0330

40.000 .4210 .0940 -.0210 .1370 .1200 .1040 .1200 .1340 -.0660 -.1340 -.1350 -.0760

55.000 .3510 .0190 -.0720 .0420 .1230 .1340 .1130 -.0830 -.1300 -.1350 -.0880

70.000 .2960 -.0650 -.0350 .0320 .1240 .1130 -.0690 -.1590 -.0880 -.0850

90.000 .2720 -.0760 -.0580 .0200 .1040 .4430 .4330 -.1830 -.2040 .0000 -.0450 -.0310

120.000 .3050 -.0030 -.0100 .0120 .6680 .5470 .6310

142.000 .3640 .0740 .1040 .3090 .2270 -.1880 -.1320 -.1020 -.0910

150.000 .1660 .1930 .5290 .8420 .1820 -.1510 -.0960 -.1790 -.1590

157.000 .3940 .1660 .1930 .5290 .8420 .1820 -.1510 -.0960 -.1790 -.1590

162.000 .3940 .1660 .1930 .5290 .8420 .1820 -.1510 -.0960 -.1790 -.1590

165.000 .3940 .1660 .1930 .5290 .8420 .1820 -.1510 -.0960 -.1790 -.1590

169.000 .3940 .1660 .1930 .5290 .8420 .1820 -.1510 -.0960 -.1790 -.1590

172.000 .3940 .1660 .1930 .5290 .8420 .1820 -.1510 -.0960 -.1790 -.1590

180.000 1.3870 .9380 .5340 .1020 -.0210 .1830 .0780 .0630 .0630 -.0410 -.0660 -.0350

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.0000 -.0640 .0000 -.1380 -.0630 -.1330 -.1370 -.1450 -.0890

40.000 -.0310 -.0040 .0000 .0000 .0000 .0000 .0000 .0000 .0000

(R80806)

AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.980

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LP	.5873	.6626	.7380	.7869	.8263	.8848	.9262	.9639	1.0015	1.0392
PMI										
70.000		-.0660	-.0900	-.0990	-.0640	-.0630	-.0860	-.0940		
80.000		-.0990	-.0760	-.0250	-.0510	-.0510	-.0970	-.1090		
90.000				.0080	-.0410	-.0530	-.1120	-.1210		
100.000									.0580	
110.000				-.0610	-.0510	.1670	-.0090	-.1480	-.1320	-.0970
120.000						.3420	.3400	-.1490	-.1150	-.1070
130.000				-.0690	-.0750	.1330	.1820	-.0160	-.0290	-.1020
140.000				-.1200		.0700	.3510	.0420	-.0090	-.0930
150.000				-.0920	-.1130	.0050				

7-918ATED PRESSURE DATA - 1A9B

DATE 20 SEP 73

PRESSURE DATA - 1A9B

1000000 ( 24 MAY 73 )

### PARAMETRIC DATA

REFERENCE DATA

YREF =	2.4211	SQ.FT.	YMRP =	28.5300	INCHES
XREF =	39.8490	INCHES	YMRP =	.0000	INCHES
ZREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

$$\text{offset}(1) = -7.110$$

1.555

PERCENT VARIABLE CP

## ..... : : CRYPTER FUSELAGE

1578

478

## Index

•

172

55.

22

5. 297

242

150

157

165

165

717

172

6

1

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33

11

25

1



**TABULATED PRESSURE DATA - 1A9B**

AMES 97-707 IA9 02A + S3 + T9 ORBITER FUSELAGE

(RBCB:7)

**MACH ( 1 ) = 1.555**  
**BETAT ( 2 ) = -5.0903**

SECTION ( 1 ) ORBITER FUSELAGE

X/LB	.0000	.0075	.0168	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
1.4060	1.0180		.4810	-.1020	.0050	.0090			.0020		-.0660	-.0730	-.0350	.0320	-.0800
20.000			.5560	.0050	.0370	.0160			-.0220		-.0680				
40.000			.6830	.0030	.1960	.0540			-.0680		-.0680	-.1220	.0820	-.0140	.0210
55.000			.7170	.1300	.2980	.2040			.1170		.1060				
70.000			.6950	.1850	.2930	.2460			.2520		.0970	-.1340	-.2010	-.0020	.0270
90.000	1.1490		.6250	.1850	.2960	.2810			.3650		.0880	-.1650	-.1740	-.0520	.0270
120.000			.5450	.1850	.3100	.4530			.5120		.0580	-.1770	-.1500	-.1300	-.0100
142.000										-.0680					
150.000			.4940	.1210	.2950	.7990			.7170		-.0910	-.1610	.0000	-.1210	-.0380
157.000							1.0000								
162.000									.6380						
											-.2720	-.0900	-.1090	-.1100	-.0440

5873	.6626	.7387	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
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[illegible]

WACH ( 1 ) =	1.555	BETAT ( 3 ) =	-3.070
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SECTION / CHARACTER FUSE AGE

SECTION (3) OF ORDER OF DISCOVERY	Q/LB	0.0020	0.0075	0.0168	0.0339	0.0632	0.1355	0.1596	0.1581	0.1732	0.1958	0.2259	0.2711	0.3270	0.3953	0.5120
PHI																
0.000	1.4180	1.0240	0.4770	-0.1340	-0.0610	0.0240			0.0550			-0.0550	-0.0980	-0.0800	0.0250	-0.0500
20.000			0.5170	-0.0400	0.0100	0.0310			0.0400			-0.0460				
40.000			0.6050	-0.0090	0.1600	0.0620			-0.0320	-0.0410	-0.1040	0.0350	-0.0400	0.0000		
55.000			0.6260	0.0500	0.1840	0.1030			0.0940			0.0710	-0.1570	-0.2300	-0.0440	-0.0130
70.000			0.6030	0.0900	0.2150	0.2240			0.2510	0.2510	0.1940	0.0560	-0.2000	-0.0800	-0.0140	-0.0140
90.000	1.0000		0.5430	0.0900	0.2100	0.2550			0.3560	0.3560	0.2010	0.0470	-0.1810	-0.1430	-0.0140	-0.0140
120.000			0.4930	0.0970	0.2380	0.4500			0.6030							



DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBOB07)

AVES 97-707 1A9 Q2A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.070

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000	X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120					

.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.040

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000	X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120					

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.040

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000	X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120					



DATE 20 SEP 73

## TABULATED PRESSURE DATA - 1A98

(RBCBUT)

ANES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.563

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

70.000 -.0210 .0010 .0630 -.0090 -.0710 -.1060

90.000 .0170 .0180 .0690 .0190 .0340 .0950 .0960

105.000 .0320 .0270 .0260 .0120 .0360 .1140 .1050

110.000 .0320 .0270 .0260 .0120 .0360 .1140 .1050

120.000 .0320 .0270 .0260 .0120 .0360 .1140 .1050

135.000 .0320 .0270 .0260 .0120 .0360 .1140 .1050

150.000 .0320 .0270 .0260 .0120 .0360 .1140 .1050

165.000 .0320 .0270 .0260 .0120 .0360 .1140 .1050

180.000 .0320 .0270 .0260 .0120 .0360 .1140 .1050

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.580

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0612 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

0.000 1.3600 .9750 .4710 -.0420 .1590 .19470

20.000 .3750 -.0810 .1200 .1980 .1120

40.000 .2930 .0870 .0900 .1120 .1120

55.000 .2280 .1320 .1630 .0260 .0260

70.000 .1640 .2020 .1950 .0950 .1670

90.000 .1310 .2330 .1920 .1670 .1490

120.000 .1680 .1420 .1420 .1490 .1490

142.000 .2570 .0110 .0920 .4180 .5550

150.000 .2570 .0110 .0920 .4180 .5550

157.000 .2570 .0110 .0920 .4180 .5550

162.000 .2570 .0110 .0920 .4180 .5550

165.000 .2570 .0110 .0920 .4180 .5550

169.000 .2570 .0110 .0920 .4180 .5550

172.000 .2570 .0110 .0920 .4180 .5550

180.000 .2570 .0110 .0920 .4180 .5550

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

0.000 .0950 .0120 .1720 .1670 .1980 .1940

40.000 .0120 .0120 .0120 .0120 .0120 .0120

70.000 .0120 .0120 .0120 .0120 .0120 .0120

90.000 .0120 .0120 .0120 .0120 .0120 .0120

105.000 .0120 .0120 .0120 .0120 .0120 .0120

110.000 .0120 .0120 .0120 .0120 .0120 .0120

120.000 .0120 .0120 .0120 .0120 .0120 .0120

135.000 .0120 .0120 .0120 .0120 .0120 .0120

150.000 .0120 .0120 .0120 .0120 .0120 .0120

165.000 .0120 .0120 .0120 .0120 .0120 .0120

180.000 .0120 .0120 .0120 .0120 .0120 .0120

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A9B

ANES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

(R00007)

BETAT ( 6 ) = 9.080

MACH ( 1 ) = 1.555

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
165.0000 .1770 .3580 .0110 -.0690 -.2280  
180.0000 -.2020 -.0800 .0600

BETAT ( 1 ) = -8.310

MACH ( 2 ) = 2.000

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI  
.0000 1.4260 .9030 .4370 .0710 .0890 .1480 .0610 .0940 .0940 .0500 .0270 .0170 .0190 .0170  
20.0000 .4800 .1130 .2030 .1720 .2030 .1720 .2030 .1720 .2030 .1720 .2030 .1720 .2030 .1720  
40.0000 .6360 .1120 .4790 .2240 .4790 .2240 .4790 .2240 .4790 .2240 .4790 .2240 .4790 .2240  
55.0000 .7180 .1420 .6000 .3940 .6000 .3940 .6000 .3940 .6000 .3940 .6000 .3940 .6000 .3940  
70.0000 .7410 .1790 .2700 .4200 .2700 .4200 .2700 .4200 .2700 .4200 .2700 .4200 .2700 .4200  
90.0000 .7260 .2420 .2670 .4440 .2670 .4440 .2670 .4440 .2670 .4440 .2670 .4440 .2670 .4440  
120.0000 .6910 .2750 .2720 .4670 .2720 .4670 .2720 .4670 .2720 .4670 .2720 .4670 .2720 .4670  
142.0000 .6170 .2440 .2870 .6690 .2870 .6690 .2870 .6690 .2870 .6690 .2870 .6690 .2870 .6690  
157.0000 .157.0000 .157.0000 .157.0000 .157.0000 .157.0000 .157.0000 .157.0000 .157.0000 .157.0000 .157.0000 .157.0000 .157.0000 .157.0000 .157.0000  
162.0000 .162.0000 .162.0000 .162.0000 .162.0000 .162.0000 .162.0000 .162.0000 .162.0000 .162.0000 .162.0000 .162.0000 .162.0000 .162.0000 .162.0000  
165.0000 .165.0000 .165.0000 .165.0000 .165.0000 .165.0000 .165.0000 .165.0000 .165.0000 .165.0000 .165.0000 .165.0000 .165.0000 .165.0000 .165.0000  
169.0000 .169.0000 .169.0000 .169.0000 .169.0000 .169.0000 .169.0000 .169.0000 .169.0000 .169.0000 .169.0000 .169.0000 .169.0000 .169.0000 .169.0000  
172.0000 .172.0000 .172.0000 .172.0000 .172.0000 .172.0000 .172.0000 .172.0000 .172.0000 .172.0000 .172.0000 .172.0000 .172.0000 .172.0000 .172.0000  
180.0000 1.4260 1.0190 .4440 .2120 .2350 .5100 1.1030 .9639 1.0015 1.0392 .2259 .2711 .3200 .3953 .5120

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
-.0420 .0770 .0770 .0090 .0140 .0310 .2280 .2380 .1470 .0580 -.0910 -.1840 -.0960  
40.0000 .1270 .0170 .0090 .0140 .0310 .2280 .2380 .1470 .0580 -.0910 -.1840 -.0960  
70.0000 .0090 .0140 .0310 .2280 .2380 .1470 .0580 -.0910 -.1840 -.0960  
90.0000 .0090 .0140 .0310 .2280 .2380 .1470 .0580 -.0910 -.1840 -.0960  
105.0000 .0090 .0140 .0310 .2280 .2380 .1470 .0580 -.0910 -.1840 -.0960  
110.0000 .0090 .0140 .0310 .2280 .2380 .1470 .0580 -.0910 -.1840 -.0960  
120.0000 .0090 .0140 .0310 .2280 .2380 .1470 .0580 -.0910 -.1840 -.0960  
135.0000 .0090 .0140 .0310 .2280 .2380 .1470 .0580 -.0910 -.1840 -.0960  
150.0000 .0090 .0140 .0310 .2280 .2380 .1470 .0580 -.0910 -.1840 -.0960  
165.0000 .0090 .0140 .0310 .2280 .2380 .1470 .0580 -.0910 -.1840 -.0960  
180.0000 .0090 .0140 .0310 .2280 .2380 .1470 .0580 -.0910 -.1840 -.0960

DATE 20 SEP 71

ABSOLUTE PRESSURE DATA - 1A9B

(R808U7)

AVES 97-757 1A9 CGA + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260

SECTION ( 1 ) ORBITER FUSELAGE

X/LB	PMI	DEPENDENT VARIABLE CP	1.581	1.732	1.958	2.259	2.711	3.200	3.953	5.120
.0000	.0075	.0188	.0339	.0602	.1355	.1906	.2711	.3200	.3953	.5120
1.4580	.9370	.5090	.0920	.5270	.1810	.0770	.0740	.0020	-.0480	-.0410
20.000	1.4580	.5160	.1510	.1040	.1940	.0890	.0760	.0090	-.0160	.0090
40.000	.6220	.1490	.3190	.2320	.0970	.2050	.0330	.0090	-.0260	.0090
55.000	.6620	.1650	.2920	.3730	.2730	.2660	.0260	-.0560	-.0080	.0480
70.000	.6780	.1640	.2230	.4000	.3230	.2740	.0070	-.0430	-.0270	.0140
90.000	1.1920	.6570	.1840	.2090	.4190	.4280	.0070	-.0310	-.0360	-.0220
120.000	.6360	.2110	.2460	.4220	.6480	.2060	-.0140	-.0310	-.0360	-.0220
142.000	.5950	.2100	.2790	.5270	.8790	.0370	-.0300	.0000	-.0360	-.0390
150.000	.5873	.6626	.7380	.7869	.8283	.9262	1.0015	1.0392		
157.000	.4550	.2110	.2320	.5870	.8250	-.1080	.0260	.0050	-.0240	-.0360
162.000					.7070					
165.000										
169.000										
172.000										
180.000										

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230

SECTION ( 1 ) ORBITER FUSELAGE

X/LB	PMI	DEPENDENT VARIABLE CP	1.581	1.732	1.958	2.259	2.711	3.200	3.953	5.120
.0000	.0075	.0188	.0339	.0602	.1355	.1906	.2711	.3200	.3953	.5120
1.4580	.9010	.4730	.0970	.0430	.1930	.1010	.0950	.0030	-.0620	-.0540
20.000	.4720	.1390	.0810	.2070	.0930	.0810	.0430	.0210	-.0260	.0460
40.000	.5580	.1410	.2150	.2490	.1090	.1820	.0430	.0210	-.0260	.0460
55.000	.5920	.1440	.2330	.3490	.2540	.2380	.0030	-.0770	-.0390	.0210
70.000	.6120	.1440	.1640	.3700	.3090	.2490	-.0080	-.0650	-.0520	.0110
90.000	1.1320	.6050	.1440	.1520	.3980	.4280	.0030	-.0430	-.0540	-.0320
120.000	.6050	.2030	.2030	.3270	.5550	.1990	-.0310	-.0430	-.0540	-.0320



DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A9B  
AMES 97-707 1A9 OCA + S3 + T9 ORBITER FUSELAGE

(RB0807)

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.940

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP														
X/LB		.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI																
180.000	1.4620	1.0780	.4630	.2250	.2590	.5760				.9240		-.1530	-.1150	-.0630	-.0610	-.0930
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						
PHI																
.000	.0230															
40.000	-.0140	-.0090														
70.000	-.0370	-.0690	-.0740	-.0430	-.0560	-.0790	-.0770									
90.000	-.0210	-.0570	.0080	-.0280	-.0410	-.0850	-.0880									
105.000																
110.000																
120.000	-.0270	-.0250	.1720	-.0080	-.1250	-.1090	-.0620	-.0350								
135.000																
150.000	-.0480	-.0410	.1790	.4620	.0590	.0200	-.0540									
165.000	-.0530	.1870	.4640	.1420	.0620	-.0350										
180.000	-.0370	-.0360														

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.970

SECTION ( 1 ) ORBITER FUSELAGE				DEPENDENT VARIABLE CP												
X/LB		.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI																
.000	1.4620	.9540	.5120	.1120	.0060	.1910				.0860	.0750	.0210	.0290	-.0520	-.0490	
20.000			.4770	.0890	-.0170	.1890				.0870	.0800	-.0080	-.0460	-.0750	-.0540	
40.000			.4150	.0850	-.0030	.1420				.1490	.0290	-.0080	-.0460	-.0750	-.0540	
55.000			.3650	.0320	.0130	.0880				.1590	.1390					
70.000			.3180	-.0590	-.0380	.0680				.1440	.1590	-.0480	-.1250	-.1170	-.0450	
90.000			.3070	-.0560	-.0450	.0480				.1690	.1320	-.0640	-.1150	-.1170	-.0560	
120.000	.8360		.3630	.0340	.0250	.0270				.1090	-.0580	-.1540	-.0990	-.0650	-.0690	
142.000			.4360	.1240	.1530	.3920				.5150	-.1650	-.1850	.0000	-.0250	-.0300	
150.000									.7870							
157.000										.6000	-.2030	-.1640	-.1110	-.0840	-.0710	
162.000																
165.000										.6830						
169.000																
172.000										.9120						
180.000	1.4620	1.0740	.4620	.2220	.2510	.5780										
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						
PHI																
.000	-.0390															
40.000	-.0500	-.0220														
			</													

-.1240  
-.1380

(R00807)

TABULATED PRESSURE DATA - 1A98

DATE 20 SEP 73

AWES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

BETAT ( 5 ) = 5.970

MACH ( 2 ) = 2.000

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI -.0480 -.0759 -.0810 -.0470 -.0670 -.0940 -.0830

70.000 -.0480 -.0759 -.0810 -.0470 -.0670 -.0940 -.0830

90.000 -.0320 -.0630 -.0790 -.0380 -.0610 -.1100 -.1010

105.000 -.0420 -.0370 .1770 -.0380 -.1800 -.1460 -.0870 -.0460

110.000 .5970 .3370 -.1340 -.1470 -.1130

120.000 .2950 .0250 -.0130 -.0290

135.000 -.0780 -.0930 .0880 .2950 .0650 .0870 -.0770

150.000 -.0840 .1830 .3650 .0870 -.0580

165.000 -.0780 -.0690 .0360

180.000

BETAT ( 6 ) = 8.010

MACH ( 2 ) = 2.000

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .0075 .0188 .0339 .0672 .1355 .1506 .1581

PHI .0000 1.4430 .9000 .4110 .0540 .0620 .1470

20.000 .3750 .0530 .0370 .1190 .0680

40.000 .3330 .0520 -.0110 .0680 .0270

55.000 .2850 .0120 .0130 .0270 .0720

70.000 .2470 -.1190 -.0860 .0210

90.000 .2400 -.0990 -.0840 .0210

105.000 .3000 -.0760 -.0100 .0270

120.000 .3670 .0970 .1260 .3390

142.000 .6780

150.000 .6670

162.000 .6670

169.000 .6670

172.000 .6670

180.000 .6670

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI -.0390

70.000 -.0380

90.000 -.0560

105.000 -.0420

120.000 -.0330

135.000 -.0330

150.000 -.0330

165.000 -.0330

180.000 -.0330

PHI -.0390

70.000 -.0380

90.000 -.0560

105.000 -.0420

120.000 -.0330

135.000 -.0330

150.000 -.0330

165.000 -.0330

180.000 -.0330



DATE 20 SEP 72

TABULATED PRESSURE DATA - 1A9B

(RBCB07)

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

SEAT ( 6 ) = 8.010

MACH ( 2 ) = 2.000

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP	
X/LB			
.5873	.6626	.7380	.7869
		.8283	.8848
		.9262	.9639
		1.0015	1.0392
PHI			
165.000	-.1520	.0150	.2330
180.000	-.3380	-.1270	-.0650
			-.1300





DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A98

(R00008)

AVES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.070

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															
1.4410	.9980	.4060	.1660	.2900	.9820										
.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						

PHI															
.0000	-.0990														
.0610	.0960														
.0510	-.0570	.0330	.0370	-.0339											
.0220	-.0290	.0760	.0120	-.0500	-.0640										
.1550	.0760	.0760	-.0090	-.0880	-.0760										
.0030	-.0040	.4030	.0910	-.0100	-.0700	-.0280									
.1350	.0000	.5560	.3780	-.0700	.0320	.0810									
.1500	-.0080	.0190	.2450	.0360	.1460	.1190									
.1650	-.0280	.2790	.4510	.2350	.2110	-.0300									
.1800	-.0320	-.0060	.2160												

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.030

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.0000	1.4330	1.0040	.4670	-.1060	.0330	.0230									
.0080	.4080	-.1180	-.0570	.0210											
.0350	.3850	-.1180	-.0390	.0370											
.0450	.3450	-.1080	-.0630	.1150											
.0900	.2980	-.1150	-.0950	.1660											
.0900	.2790	-.1470	-.1870	.2120											
.1200	.3100	-.0900	.0230	.3810											
.1420	.3850	.0770	.1780	.6330											
.1500															
.1620															
.1650															
.1800															
1.0250															

1.0250



DATE 20 SEP 75

TABULATED PRESSURE DATA - 1A98

(R8C8D8)

AMES 97-707 1A9 OCA + 63 + T9 ORBITER FUSELAGE

BETAT ( 5 ) = 7.050

MACH ( 1 ) = 1.555

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8648 .9262 .9639 1.0015 1.0392

PHI

70.0000 -.0080 -.0010 .0280 .0900 .0120 -.0540 -.0810  
 90.0000 .0200 .0190 .1110 .0440 -.0190 -.0790 -.0720  
 105.0000 .0870 -.0010 -.0260 -.0970 -.0870 -.0870  
 110.0000 .0470 .0060 .2220 -.0060 -.2030 -.1240 -.1010  
 120.0000 .7360 .3720 -.1480 -.1440 -.1560  
 135.0000 -.1020 -.0370 .1610 .3230 .1190 .0250 .0320  
 150.0000 -.1250 .2510 .4530 .1290 .1420 -.1510  
 165.0000 -.1850 -.0310 .1450

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.070

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1516 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

.0000 1.3940 .9670 .4520 -.0460 .1590 -.0450  
 20.0000 .3590 -.0770 .1060 -.0960  
 40.0000 .2830 -.0900 -.1020 -.1070  
 55.0000 .2220 -.1300 .1630 .0480  
 70.0000 .1590 -.2070 .1230 .1160  
 90.0000 .6930 .1380 .2290 .1510 .1800  
 120.0000 .1970 .1550 .1620 .1270  
 142.0000 .3020 .0240 .1320 .4600  
 150.0000 .5660  
 157.0000 .3920  
 162.0000 .5000  
 169.0000 .9080  
 172.0000 1.3940 .9710 .3650 .1750 .3160 .8080  
 180.0000 .5873 .6626 .7380 .7869 .8283 .8648 .9262 .9639 1.0015 1.0392

PHI

.0000 -.1110  
 40.0000 -.1270  
 70.0000 -.0410  
 90.0000 -.0170  
 105.0000 .1030  
 110.0000 .1810  
 120.0000 .7330  
 135.0000 -.1510  
 150.0000 .1750  
 157.0000 .3920  
 162.0000 .5000  
 169.0000 .9080  
 172.0000 1.3940 .9710 .3650 .1750 .3160 .8080  
 180.0000 .5873 .6626 .7380 .7869 .8283 .8648 .9262 .9639 1.0015 1.0392

-.1180  
 -.1840

-.0300  
 -.0820  
 -.2360  
 -.1190

150.0000

DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A96

(RBOB08)

AVES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.070

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
163.000 -.1170 .2010 .3410 .0340 -.0530 -.2110  
180.000 -.1740 -.0350 .0520

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.310

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0270 .0075 .0188 .0339 .0612 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI  
.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380  
20.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380  
40.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380  
55.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380  
70.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380  
90.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380  
120.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380  
142.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380  
150.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380  
157.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380  
162.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380  
165.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380  
169.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380  
172.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380  
180.000 1.4750 .9020 .4290 .0640 .0760 .1630 .0640 .0390 .0680 .0390 .0180 .0220 .0380 .0380

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
.000 -.0390 .0570 .0160 .0310 .0380 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190  
40.000 .1130 .0320 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310  
70.000 .0320 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310  
90.000 .0320 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310  
110.000 .0320 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310  
120.000 .0320 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310  
135.000 .0320 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310  
140.000 .0320 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310  
163.000 .0320 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310  
180.000 .0320 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310 .0310

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

(RBO008)

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.270

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1596	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PM1															
000	1.4980	.9300	.4900	.0790	.0290	.1840			.0800		.0730	.0020	.0160	-.0300	-.0150
20.000			.5110	.1420	.0820	.2030			.0910		.0840				
40.000			.6270	.1410	.2670	.2490			.1040		.0400	.0260	-.0100	-.0070	.0810
55.000			.6710	.1590	.2810	.3990			.2990		.2320				
70.000			.6870	.1600	.2200	.4310			.3670		.2880	.0390	-.0500	.0100	.0720
90.000			.6800	.1970	.2080	.4520			.4920		.2900	.0210	-.0280	-.0090	.0410
120.000	1.2250		.6810	.2290	.2350	.4540			.6670	.1390	.2370	.0030	-.0070	-.0110	.0220
142.000															
150.000			.6480	.2420	.3060	.5870		1.1290	.9280						-.0190
157.000									.8610						
162.000															
165.000									.7480						
169.000															
172.000							1.1310								
180.000	1.4980	1.1200	.5070	.2580	.2810	.6570			.9790						
X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
											-.1550	-.1100	-.0360	-.1180	-.0490

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1596	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PM1															
000	1.4980	.9180	.4690	.0690	.0260	.1890			.0990		.0990	.0440	.0250	-.0350	.0160
20.000			.4780	.1260	.0750	.2120			.1020		.0920				
40.000			.5670	.1230	.2540	.2540			.1140		.0610	.0230	-.0220	-.0040	.0430
55.000			.5940	.1330	.2420	.3540			.2680		.2130				
70.000			.6130	.1320	.1710	.3790			.3320		.2590	.0080	-.0710	-.0200	.0480
90.000			.6130	.1500	.1880	.4070			.4620		.2560	.0430	-.0550	-.0370	.0200
120.000	1.1530		.6360	.2260	.2270	.3240			.5970		.2180	-.0150	-.0220	-.0320	-.0110



AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE (RB00008)

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0168	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000									.0750						
150.000			.6300	.2370	.2990	.5830		1.0490	.8710	.0490	-.0340	.0000	-.0110	-.0250	
157.000									.8160		-.1320	.0040	.0140	.0010	-.0230
162.000									.7540						
165.000															
169.000									.9880		-.1150	-.1080	-.0020	-.0530	-.0370
172.000							1.0550								
180.000	1.4980	1.1230	.5160	.2670	.2990	.6290									
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

## PHI

.0000	.0070														
.0470	.0150	.0960	.0210	-.0520	-.1750			-.1860		-.1220					
.0120	-.0100	-.0270	.0550	.0050	-.0040	.0090				-.1240					
.0380	.0010	.0930	.0570	.0450	-.0280	-.0080									
.105.000	.1770	.1470	.0480	-.0270	-.0340										
.110.000									.0790						
.120.000	.0520	.0290	.4080	.2280	.0110	-.0170	.0060		.0630						
.135.000	.4990	.4240	-.0360	-.0130	.0950										
.150.000	.0360	.0310	.2030	.2910	-.0240	.1280	.1850								
.165.000	.0290	.2240	.4070	.2290	.2260	.0680									
.180.000	-.0160	-.0140	.1620												

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.920

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0168	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.0000	1.4970	.9180	.4380	.0930	.0360	.1760			.1260		.1160	.0540	.0330	-.0260	.0210
.20.000			.4160	.0840	.0300	.1710			.1260		.1150	.0520	.0310	-.0300	-.0160
.40.000			.4100	.0840	.0710	.1530			.1360		.1090	.0310	.0220	-.0300	-.0160
.55.000			.3800	.0530	.0810	.1590			.1820		.1780				
.70.000			.3660	.0320	-.0060	.1220			.2580		.1790	-.0250	-.1040	-.0790	-.0630
.90.000	.9110	.3800	.0010	-.0070	.1300				.2530		.1530	-.0540	-.0870	-.0690	-.0190
.120.000			.4450	.0890	.1830	.0900			.2010		.1090	-.1870	-.0720	-.0530	-.0320
.142.000										-.1030					
.150.000			.5130	.1750	.2160	.3440			.6200		-.1290	-.1420	.0040	.0160	-.0040
.157.000								.8440							
.162.000									.6640						
.165.000															
.169.000															
.182.000									.7380						
							1.0370								





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TABULATED PRESSURE DATA - 1A9B

(RECORD)

AMES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE

BETAT ( 6 ) = 8.010

MACH ( 2 ) = 2.000

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PMI										
165.0000										
180.0000										

PMI

165.0000

180.0000

-.1120    .1070    .2230    .0060    -.0380    -.1130

-.1540    -.0590    -.0360

AVES 97-707 IA9 Q2A + S3 + T9 ORBITER FUSELAGE

(RECEIVED) ( 24 MAY 73 )

REF ID: A77777

SREF =	2.4210	SQ.FT.	YMRP =	28.5300	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
ZREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

## PARAMETRIC DATA

```
ALPHAT = -6.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUSFLR = .000
```

MACH ( 1 ) = 1.555      BETAT ( 1 ) = -8.160

SECTION ( ) ORBITER FUSELAGE	DEPENDENT VARIABLE CP
1	0.000
2	0.000
3	0.000
4	0.000
5	0.000
6	0.000
7	0.000
8	0.000
9	0.000
10	0.000
11	0.000
12	0.000
13	0.000
14	0.000
15	0.000
16	0.000
17	0.000
18	0.000
19	0.000
20	0.000
21	0.000
22	0.000
23	0.000
24	0.000
25	0.000
26	0.000
27	0.000
28	0.000
29	0.000
30	0.000
31	0.000
32	0.000
33	0.000
34	0.000
35	0.000
36	0.000
37	0.000
38	0.000
39	0.000
40	0.000
41	0.000
42	0.000
43	0.000
44	0.000
45	0.000
46	0.000
47	0.000
48	0.000
49	0.000
50	0.000
51	0.000
52	0.000
53	0.000
54	0.000
55	0.000
56	0.000
57	0.000
58	0.000
59	0.000
60	0.000
61	0.000
62	0.000
63	0.000
64	0.000
65	0.000
66	0.000
67	0.000
68	0.000
69	0.000
70	0.000
71	0.000
72	0.000
73	0.000
74	0.000
75	0.000
76	0.000
77	0.000
78	0.000
79	0.000
80	0.000
81	0.000
82	0.000
83	0.000
84	0.000
85	0.000
86	0.000
87	0.000
88	0.000
89	0.000
90	0.000
91	0.000
92	0.000
93	0.000
94	0.000
95	0.000
96	0.000
97	0.000
98	0.000
99	0.000
100	0.000

[illegible]

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE (RBC809)

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.170

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4460	.9920	.4730	-.0730	.1110	.0100			-.0220		-.0490	-.0450	.0640	.0510	-.1060
20.000			.5590	.0460	.1360	.0170			-.0140		-.0440				
40.000			.7020	.1110	.2900	.0460			-.0680		-.0680	-.1360	.0240	.0360	.0150
55.000			.7540	.1860	.3940	.2440			.2190		.1480				
70.000			.7490	.2350	.3920	.2980			.3390		.1440	-.1020	-.1610	.0500	.0900
90.000		1.2210	.6970	.2350	.3990	.3610			.4310		.1180	-.1220	-.1330	.0380	.0780
120.000			.6530	.2350	.4280	.6010			.5880		.1110	-.1410	-.1910	-.0610	.0450
142.000															
153.000			.6060	.2350	.4140	.9110			.7870		-.0290	-.0670	.0000	-.0510	.0220
157.000							1.0430								
162.000									.7100						
165.000									.5930		-.2170	-.0330	-.0480	-.0460	.0270
169.000															
172.000							1.2090								
180.000	1.4460	1.0300	.4450	.2310	.3450	.9380			.8220		-.3060	-.1240	-.1070	-.1060	-.0670

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.180

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4630	.9980	.4440	-.1190	.0590	.0130			.0470		-.0310	.0270	.1170	.0290	-.1010
20.000			.5040	-.0240	.0950	.0190			.0390		-.0110				
40.000			.6230	-.0170	.2330	.1460			-.0470		-.0450	-.0200	.0190	.0100	-.0110
55.000			.6630	.0590	.3090	.2220			.1970		.1240				
70.000			.6570	.1270	.3030	.2810			.3160		.0980	-.1180	-.1830	.0050	.0680
90.000		1.1580	.6160	.1520	.3010	.3470			.4030		.0880	-.1480	-.1610	-.0420	.0520
120.000			.5040	.1530	.3480	.5890			.5240		.1120	-.1610	-.1250	-.0770	.0330









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## TABULATED PRESSURE DATA - 1A98

(R08089)

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 7.740

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
165.000 -.0510 .2800 .4170 .1120 .0300 -.1560  
180.000 -.1530 -.0480 .1850

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.340

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0672	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3270	.3953	.5120
PHI															
.000	1.5180	.9160	.4450	.0780	.0750	.1730			.0740		.0460	-.0140	-.0300	-.0210	-.0150
20.000			.5040	.1550	.1500	.2040			.1030		.0790	.0270	-.0130	.1280	.0880
40.000			.6580	.1550	.3830	.2500			.3320		.3050		-.0140	.0590	.1450
55.000			.7230	.1910	.4550	.4360			.4180		.3370	.0830	.0170	.0390	.1140
70.000			.7630	.2170	.3170	.4730			.5820		.3370	.0570	.0300	.0330	.0450
90.000	1.3100		.7690	.2680	.2890	.4920			.7730	.2150	.2890	.0460	.0300		
120.000			.7700	.3270	.3480	.5120				.1120	.1120	.0330	.0240	.0250	.0210
142.000			.7240	.3260	.3970	.6930		1.2370							
150.000									.9420		-.0470	.1010	.0660	.0340	.0180
157.000									.7890						
162.000															
165.000															
169.000															
172.000	1.5180	1.1520	.5480	.2990	.3310	.7520	1.1800		1.0170						
180.000								.9639	1.0015	1.0392					

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
165.000 -.0140 .0490 .1790 .0890 -.0070 -.1110 -.2060 -.1100  
180.000 .1070 .0450 .0340 .1230 .0790 .0580 .0760 -.2120

X/LB	.0000	.0075	.0188	.0339	.0672	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3270	.3953	.5120
PHI															
.000	1.5180	.9160	.4450	.0780	.0750	.1730			.0740		.0460	-.0140	-.0300	-.0210	-.0150
20.000			.5040	.1550	.1500	.2040			.1030		.0790	.0270	-.0130	.1280	.0880
40.000			.6580	.1550	.3830	.2500			.3320		.3050		-.0140	.0590	.1450
55.000			.7230	.1910	.4550	.4360			.4180		.3370	.0830	.0170	.0390	.1140
70.000			.7630	.2170	.3170	.4730			.5820		.3370	.0570	.0300	.0330	.0450
90.000	1.3100		.7690	.2680	.2890	.4920			.7730	.2150	.2890	.0460	.0300		
120.000			.7700	.3270	.3480	.5120				.1120	.1120	.0330	.0240	.0250	.0210
142.000			.7240	.3260	.3970	.6930		1.2370							
150.000									.9420		-.0470	.1010	.0660	.0340	.0180
157.000									.7890						
162.000															
165.000															
169.000															
172.000	1.5180	1.1520	.5480	.2990	.3310	.7520	1.1800		1.0170						
180.000								.9639	1.0015	1.0392					

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

AMES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE

(R8C8U9)

MACH ( 2 ) = 2.1100 BETAT ( 2 ) = -6.300

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0189	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5380	.9420	.4800	.0950	.0370	.1830			.0880		.0730	.0040	.0310	-.0020	.0320
20.000		.5200	.1450	.0820	.2080				.1010		.0880				
40.000		.6340	.1440	.2630	.2580				.1130		.0580	.0210	-.0060	.1110	.0800
55.000		.6780	.1720	.3080	.4170				.3210		.2590				
70.000		.7080	.1820	.2470	.4530				.4030		.3070	.0520	-.0090	.0320	.1010
90.000	1.2560		.7080	.2200	.2260	.4750			.5430		.3040	.0360	-.0090	.0100	.0800
120.000			.7280	.2910	.2970	.4670			.6920		.2670	.0230	.0180	.0170	.0250
142.000										.1350					
150.000			.7100	.2930	.3610	.6760			.9760		.0990	.0080	.0020	.0170	.0070
157.000							1.2020								
162.000									.9030		-.0900	.0660	.0540	.0300	.0050
165.000									.7960						
169.000															
172.000							1.2440								
180.000	1.5380	1.1800	.5680	.3140	.3340	.7470			1.0310		-.1340	-.0900	-.0070	-.0700	-.0220

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI .000 .0200 .0740 .0310 .0160 .0170 .0870 .0620 .0490 .0380 .0670 .0380 .0130 .1100 .1020 .1420 .2140

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.250

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5560	.9540	.4980	.0700	.0150	.1940			.0930		.1180	.0590	.0580	.0020	.0320
20.000		.5120	.1130	.0480	.2180				.1020		.1070				
40.000		.5920	.1140	.2000	.2600				.1190		.0800	.0250	-.0130	.0960	.0460
55.000		.6170	.1250	.2470	.3700				.2870		.2260				
70.000		.6380	.1230	.1880	.3990				.3630		.2770	.0260	-.0060	-.0030	.0790
90.000	1.1960		.6430	.1710	.1760	.4220			.4960		.2710	.0120	-.0350	-.0250	.1580
120.000			.6790	.2380	.2720	.3470			.6320		.2350	.0010	.0000	-.0100	.0100





(RBC019)

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 SETAT ( 5 ) = 8.020

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP				
X/LB						
PHI						
70.000	-.0050	-.0330	-.0330	.0120	.0060	-.0330
80.000	.0030	-.0280	.0490	.0120	-.0590	-.0740
90.000			.0520	-.0410	-.0120	-.0770
100.000						.0150
110.000	-.0010	.0000	.2070	-.0430	-.1790	-.0680
120.000			.4650	.3480	-.0820	-.1130
130.000	-.1460	-.0460	.1400	.1660	.1070	-.0430
140.000	-.0970	.1020	.2440	.0630	.0160	-.1680
150.000	-.1450	-.0450	-.0380			-.0650



DATE 03 SEP 73

TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE  
 (RBCB10)

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.210

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4650	.9790	.4580	-.0730	.1140	.0110			-.0220	.1450	.1870	.0400	-.1120		
20.000			.5460	.0360	.1440	.0170			-.0090						
40.000			.6930	.1040	.3020	.0390			-.0600	-.0050	.0330	.0660	.0120		
55.000			.7490	.1930	.4090	.2560			.2410	.1580					
70.000			.7510	.2380	.4230	.3290			.2500	.1560	-.0870	-.0850	.0740	.1220	
90.000			.7150	.2450	.4210	.4310			.4440	.1230	-.1010	-.1150	.0580	.1140	
120.000	1.2400		.6900	.2560	.4720	.6540			.5880	.1400	-.1240	-.0620	-.0180	.0780	
142.000			.6500	.2730	.4730	.9490			.8140	.0010	-.0460	.0020	-.0170	.0510	
150.000							1.0600								
157.000									.7390						
162.000									.6320						
165.000															
169.000															
172.000							1.2280		.8570						
180.000	1.4650	1.0800	.4960	.2810	.4020	1.0140									
X/LB	.5973	.6626	.7313	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

PHI															
.000	-.1660			.0680	-.0250	-.1080	-.3150	-.1430							
40.000	-.0440	.1970		.0440	.1480	.1110	.0550	.0440							
70.000	.0070	.0430	.0620	.1820	.1100	.1030	.0450	.0240							
90.000		.0300	.0620	.2660	.1660	.1010	.0170	.0090							
105.000								.0690							
110.000		.0580	.0360	.5510	.2030	-.0160	.0130	.0860							
120.000				.6330	.4540	-.0200	.1220	.2190							
135.000		.0900	.0310	.2890	.3100	.0870	.2900	.2630							
150.000		.0570		.3510	.5310	.3340	.3640	.0890							
165.000															
180.000		-.0670	-.0120	.1790											

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4900	1.0030	.4690	-.0810	.0920	.0070			.0500	.1680	.1640	.0100	-.1110		
20.000			.3260	.0130	.1150	.0150			.0300						
40.000			.6330	.0430	.2480	.0430			-.0390	-.0550	.0030	.0280	.0330	-.0270	
55.000			.6760	.0870	.3220	.2350			.1320	.1320					
70.000			.6710	.1340	.3290	.3110			.1150	.1150	-.1090	-.1350	.0300	.0940	
90.000			.6350	.1660	.3210	.4150			.0950	.1150	-.1310	-.1460	.0200	.1640	
120.000	1.1820		.6340	.1890	.3930	.7740			.1180	-.1500	-.1000	-.1490	-.0640	.0640	







DATE 20 SEP 77 TABULATED PRESSURE DATA - 1A00

(R00810)

AVES 97-707 1A0 02A + S3 + T9 ORBITER FUSELAGE

MACH (1) = 1.555 BETAT (5) = 5.710

SECTION (1) ORBITER FUSELAGE  
X/LB .5873 .6826 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
70.0000 -.0330 -.0220 .0550 .1570 .0740 .0090 -.0030  
90.0000 -.0120 -.0290 .1160 .1210 .0400 -.0230 .0050  
105.0000 .0500 .0660 .0850 .0850 .0240 -.0360 -.0080  
110.0000 .0040 -.0270 .1470 .0110 -.1580 -.0750 -.0570  
120.0000 .0040 -.0270 .1470 .0110 -.1580 -.0750 -.0570  
135.0000 -.0200 -.0300 .1900 .0200 .1770 .0730 .0170  
150.0000 -.0540 .3080 .4960 .1710 .1050 .1110  
165.0000 -.0220 -.0180 .2260

MACH (1) = 1.555 BETAT (6) = 7.770

SECTION (1) ORBITER FUSELAGE  
X/LB .0000 .0075 .0188 .0339 .0672 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI  
20.0000 1.4550 .9670 .4240 -.0680 .1420 -.0160  
40.0000 .3540 -.1100 .0550 -.0470  
60.0000 .2940 -.1100 .0770 .0210  
80.0000 .2460 -.1320 .1320 .1300  
100.0000 .2010 -.1740 .1730 .1970  
120.0000 .7640 .2040 -.1890 .1500 .2920  
140.0000 .2900 -.0640 .0200 .1910  
160.0000 .4140 .1230 .2300 .5890  
180.0000 .6310  
200.0000 .4520  
220.0000 .5790  
240.0000 .8110  
260.0000 .0290  
280.0000 -.0820  
300.0000 -.1160  
320.0000 -.1920  
340.0000 -.3350

SECTION (1) ORBITER FUSELAGE  
X/LB .5873 .6826 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
40.0000 -.0330 -.0220 .0550 .1570 .0740 .0090 -.0030  
60.0000 -.0120 -.0290 .1160 .1210 .0400 -.0230 .0050  
80.0000 .0500 .0660 .0850 .0850 .0240 -.0360 -.0080  
100.0000 .0040 -.0270 .1470 .0110 -.1580 -.0750 -.0570  
120.0000 .0040 -.0270 .1470 .0110 -.1580 -.0750 -.0570  
140.0000 -.0200 -.0300 .1900 .0200 .1770 .0730 .0170  
160.0000 -.0540 .3080 .4960 .1710 .1050 .1110  
180.0000 -.0220 -.0180 .2260

(R80810)

AMES 97-737 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 7.770

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .5626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

163.000 -.0500 .3090 .4620 .1410 .0570 -.1410  
180.000 -.1010 -.0390 .2270

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.390

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

.000 1.5720 .9440 .4490 .0710 .1390 .1770 .0990 .0590 .0590 .0590 .0590 .0590 .0590 .0590  
20.000 .5420 .1640 .2010 .2140 .1260 .1260 .1260 .1260 .1260 .1260 .1260 .1260 .1260 .1260  
40.000 .7010 .1970 .4340 .2560 .1240 .1030 .0610 .0610 .0610 .0610 .0610 .0610 .0610 .0610  
55.000 .7690 .2410 .5530 .4620 .3780 .3490 .3710 .3710 .3710 .3710 .3710 .3710 .3710 .3710  
70.000 .8180 .2680 .4830 .5070 .4390 .4390 .4390 .4390 .4390 .4390 .4390 .4390 .4390 .4390  
90.000 1.3660 .8100 .3090 .3740 .5380 .6280 .6280 .6280 .6280 .6280 .6280 .6280 .6280 .6280  
120.000 .8350 .3580 .4270 .5910 .8510 .8510 .8510 .8510 .8510 .8510 .8510 .8510 .8510 .8510  
142.000 .7940 .3650 .4660 .8920 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220  
150.000 .7940 .3650 .4660 .8920 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220  
162.000 .7940 .3650 .4660 .8920 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220  
169.000 .7940 .3650 .4660 .8920 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220  
172.000 .7940 .3650 .4660 .8920 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220 1.3220  
180.000 1.5720 1.2200 .6110 .3650 .4520 .9540 1.3350 1.3350 1.3350 1.3350 1.3350 1.3350 1.3350 1.3350

X/LB

PHI

.000 .0140 .1090 .0640 .0739 .0540 .1790 .0940 .0290 -.1170 -.1710 -.1280  
40.000 .0640 .1090 .0640 .0739 .0540 .1790 .0940 .0290 -.1170 -.1710 -.1280  
70.000 .0640 .1090 .0640 .0739 .0540 .1790 .0940 .0290 -.1170 -.1710 -.1280  
90.000 .0640 .1090 .0640 .0739 .0540 .1790 .0940 .0290 -.1170 -.1710 -.1280  
105.000 .0640 .1090 .0640 .0739 .0540 .1790 .0940 .0290 -.1170 -.1710 -.1280  
110.000 .0640 .1090 .0640 .0739 .0540 .1790 .0940 .0290 -.1170 -.1710 -.1280  
120.000 .0640 .1090 .0640 .0739 .0540 .1790 .0940 .0290 -.1170 -.1710 -.1280  
135.000 .0640 .1090 .0640 .0739 .0540 .1790 .0940 .0290 -.1170 -.1710 -.1280  
150.000 .0640 .1090 .0640 .0739 .0540 .1790 .0940 .0290 -.1170 -.1710 -.1280  
165.000 .0640 .1090 .0640 .0739 .0540 .1790 .0940 .0290 -.1170 -.1710 -.1280  
180.000 .0640 .1090 .0640 .0739 .0540 .1790 .0940 .0290 -.1170 -.1710 -.1280

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE (R80810)

MACH (2) = 2.000 BETAT (2) = -6.330

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
20.000	1.6030	.9660	.4610	.0630	.1000	.1780			.1140		.0780	.0120	.0160	.0500	.0520
40.000			.5240	.1350	.1480	.2160			.1250		.1090				
60.000			.6630	.1340	.3420	.2680			.1190		.0920	.0250	-.0070	.1060	.0950
80.000			.7150	.1760	.4030	.4450			.3460		.2910				
100.000			.7540	.1930	.3020	.4970			.4540		.3330	.0740	-.0180	.0590	.1510
120.000	1.3270		.7630	.2560	.2720	.5170			.5940		.3260	.0540	.0200	.0380	.1280
140.000			.7940	.3320	.3610	.5710			.7570		.3040	.0460	.0520	.0510	.0650
160.000			.7790	.3500	.4300	.8400			1.0380	.1610	.1410	.0460	.0000	.0510	.0450
180.000	1.6030	1.2520	.6260	.3500	.4040	.8650	1.2930		.9630		-.0610	.1120	.0850	.0630	.0420
200.000									.8450						
220.000															
240.000															
260.000															
280.000															
300.000															
320.000															
340.000															
360.000															
380.000															
400.000															
420.000															
440.000															
460.000															
480.000															
500.000															
520.000															
540.000															
560.000															
580.000															
600.000															
620.000															
640.000															
660.000															
680.000															
700.000															
720.000															
740.000															
760.000															
780.000															
800.000															
820.000															
840.000															
860.000															
880.000															
900.000															
920.000															
940.000															
960.000															
980.000															
1000.000															

MACH (2) = 2.000 BETAT (3) = -4.280

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
20.000	1.6150	.9970	.5150	.0660	.0300	.1950			.1050		.1130	.0720	.0890	.0780	.0470
40.000			.5520	.1260	.0640	.2190			.1190		.1240				
60.000			.6350	.1160	.2270	.2640			.1240		.0990	.0360	-.0050	.1060	.0790
80.000			.6680	.1670	.2870	.4010			.3140		.2510				
100.000			.6850	.1610	.2380	.4380			.4200		.2970	.0400	-.0460	.0300	.1170
120.000	1.2560		.6990	.2040	.2200	.4520			.5480		.2830	.0300	-.0150	.0010	.1040
140.000			.7430	.2790	.3270	.4260			.6760		.1260	.0200	.0280	.0230	.0420

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A9B  
AMES 97-707 1A9 ORA + S3 + T9 ORBITER FUSELAGE

(R00810)

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															
1.6150	1.2590	60	.3720	.4180	.8160										
1.5873	.6626	.7390	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						

X/LB

PHI

.000	.0090														
40.000	.0710	.0130	.0610	-.0040	-.0440	-.1590	-.1800								
70.000	.0610	.0290	.0160	.1060	.0870	.0670	.0480								
90.000	.0600	.0390	.1440	.1080	.1120	.0430	.0300								
105.000			.2210	.1900	.1130	.0230	.0140								
110.000			.4260	.2540	.0540	.0400	.0460								
120.000			.6350	.4840	.0430	.0680	.1730								
135.000			.0780	.3940	.0680	.2260	.2510								
150.000			.0790	.3020	.5220	.3200	.1210								
165.000			.0310	.2180											

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6170	.9640	.4710	.0330	.0660	.1720									
20.000			.4740	.0830	.0410	.2020									
40.000			.5120	.0820	.1240	.2390									
55.000			.5200	.0820	.1540	.3400									
70.000			.5290	.0820	.0990	.3460									
90.000			1.1220	.0960	.0930	.2360									
120.000			.6260	.2130	.2190	.2240									
142.000			.6840	.2960	.3570	.6600									
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															

1.3150

AVES 97-7J7 1A9 C2A + S3 + T9 OPER FUSELAGE

SECRET (C) =

## DEPENDENT VARIABLE CP

[illegible]

**BETAT ( 5 ) =**

**DEPENDENT VARIABLE CP**

[illegible]

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

(RECEIVED)

MACH (2) = 2.000

**BETAT ( S ) = 3.940**

## SECTION ( 2 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.5873	.6620	.7360	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
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### III

70,000	.0293	-.0060	.0010	.0320	-.0050	-.0250
90,000	.0465	.0040	.0720	.0380	.0300	-.0435
100,000			.0960	.0280	.0290	-.0470
110,000						.0705
20,000	.0370	.0000	.2335	.0300	-.0970	-.0180
35,000			.7565	.4290	-.0500	-.0460
50,000	.0120	.0310	.2890	.5910	.1750	.0770
65,000	-.0160	.2730	.6180	.2520	.1680	.0160
80,000	.0340	.0320	.1920			.0620

MACH ( 2 ) = 2.000      BETAT ( 6 ) = 5.980

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB
.0000 .0075 .0188 .0399 .0602 .1355 .1976 .1732 .1958 .2259 .2711 .3210 .3953 .5120

III

Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377</
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[illegible]





### PARAMETRIC DATA

ALPHAT =	-8.000	ORBINC =	.500
RUDDER =	-15.000	ELEVON =	.000
RUDELFL =	.000		

## REFERENCE DATA

SRP	=	2.4210	96.FT.	YRP	=	28.5300	INCHES
LRP	=	39.8490	INCHES	YRP	=	.0000	INCHES
BRP	=	39.8490	INCHES	ZRP	=	.0000	INCHES
SCALE	=	.0000	SCALE				

BEYAT (1) = -8.420

### SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

100

[illegible]

X/LB	.5873	.6626	.7380	.8100
PHI			-.2190	-.1240 -.1789

[illegible]



DATE 20 SEP 73 TABULATED PRESSURE DATA - IASB

AKES 97-737 IAG 02A + S3 + T9 ORBITER FUSELAGE

(R80811)

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.310

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															
1.4870	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						

PHI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -1.180

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															
1.4870	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						

1.2030

AXES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

$$\text{BETAT} (4) = -.180$$
$$\text{BETAT} (4) = -.180$$

SECTION: ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE										DEPENDENT VARIABLE					
X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
185.000	1.4990	1.1150	.5180	.2950	.4110	1.0850			.8780		-.2340	-.1710	.0280	-.0130	-.0290
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

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PMI	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442
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**REFAT ( 5 ) = 3.940**

### SECTION 11 ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP														
/_B		.0070	.0075	.0188	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3270	.3953	.5120
PWT																
.000	1.4930	.9930	.4170	-.1210	.0580	-.0030	-.0030		.0540			.0000	.1760	.1610	.0070	-.1050
20.000			.3830	-.1270	-.0210	-.0110			.0840			.0160	.0180	.0360	-.0650	-.1050
40.000			.3680	-.1310	-.0250	.0530			.1310			.0650				
55.000			.3660	-.1220	-.0410	.1530			.1810			.0630	-.2040	-.2170	-.0540	.0470
70.000			.3390	-.1220	-.0680	.2170			.2640			.0370	-.2260	-.2340	-.0590	.0380
90.000			.3390	-.0950	-.0380	.3350			.2880			-.0570	-.2410	-.1720	-.1190	-.0330
120.000			.3980	.0070	.1130	.4340			.2830			-.2510				
142.000			.4930	.1690	.2910	.7250			.5780			-.2250	-.1620	.0000	-.0520	-.0670
157.000					.7350											
162.000									.5030			-.3230	-.1860	-.0870	-.0410	-.0930
169.000									.6040							
172.000																
180.000	1.4930	1.1180	.5120	.3010	.4080	1.0420		1.1250				-.2320	-.1520	-.0680	-.0330	-.0690
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						
PWT																
.000																
20.000																
40.000																
55.000																
70.000																
90.000																
120.000																
142.000																
157.000																
162.000																
169.000																
172.000																
180.000																
X/LB																
PWT																
.000																
20.000																
40.000					</											

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

(RBC811)

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000	-.5280	-.0170	.0170	.0810	.0150	.0510	-.0530			
90.000	-.0060	-.0180	.0870	.0260	-.0220	-.0780	-.0560			
105.000		.0770	-.0120	-.0220	-.1000	-.0630				
120.000						.0040				
135.000	.0150	-.0230	.1870	-.0120	-.2080	-.1270	-.0990	-.0060		
150.000	.0320	.0320	.7900	.3490	-.1420	-.1350	-.1430			
165.000	-.0110	.0320	.3190	.5600	.1900	.0470	-.0020			
180.000	.0060	.0230	.3340	.5870	.2010	.1000	-.1180			
				.2860						

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
0.000	1.4690	.9830	.4540	-.0750	.1080	.0130			-.1250	.1580	.1930	.0280	-.1180		
25.000		.3760	-.0040	-.0010	-.0010				.0180	-.0260	.0310	.0350	-.0900	-.1300	
40.000		.3370	-.0970	-.0280	.0360	.1990			.0920	.0140	.0350	-.0900	-.1300		
55.000		.2940	-.1090	-.0760	.1350	.2460			.0560	.0210	-.2120	-.2240	-.0740	.0410	
70.000		.2600	-.1380	-.1220	.1990	.2460			.0210	-.0450	-.2360	-.2490	-.0740	.0280	
90.000	.8240	.2630	-.1480	-.0980	.2980	.2550			-.0450	-.0460	-.2570	-.1860	-.1450	-.0500	
120.000		.3360	-.0290	.0540	.2940	.1940			-.2830						
142.000		.4480	.1430	.2530	.6500	.4750				-.2690	-.1960	.0000	-.0670	-.0670	
150.000						.6640									
162.000									.4670						
165.000										-.3270	-.2040	-.0440	-.1000	-.1270	
169.000									.5860						
172.000															
180.000	1.4690	1.0900	.4950	.2980	.4090	.9980	1.0630		.8240						

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI															
0.000	-.1720														
40.000	-.1390	-.0180	-.1050	-.1300	-.2230	-.2250	-.1620								
70.000		-.0340	.0170	.0970	.1580	.0580	-.0240								
90.000		-.0160	.0100	.1480	.0230	-.0330	-.0190								
105.000			.1570	.0260	.0270	-.0450	-.0150								
120.000		.0020	-.0330	.2820	-.0330	-.2040	-.0670	-.0690	.0140						
135.000			.7780	.4210	-.1240	-.1260	-.1390		.0000						
150.000	-.0320	-.0540	.1780	.4040	.1940	.0840	.0120								

TABULATED PRESSURE DATA - 1A99

AMES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE (R80811)

MACH ( 1 ) = 1.155 SCOTAT ( 6 ) = 6.000

SECTION ( 1 ) ORBITER FUSELAGE  
DEPENDENT VARIABLE CP  
X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
165.0000 -.0680 .3240 .4890 .1960 .1190 -.1100  
180.0000 -.0340 -.0340 .2110

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.060

SECTION ( 1 ) ORBITER FUSELAGE  
DEPENDENT VARIABLE CP  
X/LB .0020 .0075 .0188 .0339 .0612 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3210 .3953 .5120

PHI  
165.0000 1.4500 .9700 .4420 -.0720 .1400 -.0220 -.0820 .1440 .1210 .1550 .1120  
180.0000 .3400 -.1140 .0730 -.0680 -.0840  
200.0000 .2800 -.1150 -.0870 -.0090 .0430 .0280  
220.0000 .2310 -.1750 -.1440 .1150 .1810  
240.0000 .1870 -.2280 -.1850 .1770 .2250 .1820  
260.0000 .1870 -.2170 -.1610 .2650 .2210  
280.0000 .2760 -.1810 .1420 .1600 .1160  
300.0000 .4000 .1090 .2220 .5780 .6190  
320.0000 .5720  
340.0000 .5740  
360.0000 .5740  
380.0000 .5740  
400.0000 .5740  
420.0000 .5740  
440.0000 .5740  
460.0000 .5740  
480.0000 .5740  
500.0000 .5740  
520.0000 .5740  
540.0000 .5740  
560.0000 .5740  
580.0000 .5740  
600.0000 .5740  
620.0000 .5740  
640.0000 .5740  
660.0000 .5740  
680.0000 .5740  
700.0000 .5740  
720.0000 .5740  
740.0000 .5740  
760.0000 .5740  
780.0000 .5740  
800.0000 .5740  
820.0000 .5740  
840.0000 .5740  
860.0000 .5740  
880.0000 .5740  
900.0000 .5740  
920.0000 .5740  
940.0000 .5740  
960.0000 .5740  
980.0000 .5740  
1000.0000 .5740

PHI  
165.0000 -.1640  
180.0000 -.0920  
200.0000 .0170  
220.0000 .0560  
240.0000 .1290  
260.0000 .0780  
280.0000 .1930  
300.0000 .0920  
320.0000 .7810  
340.0000 .3980  
360.0000 .2270  
380.0000 .0690  
400.0000 -.0390  
420.0000 -.1190  
440.0000 -.1620  
460.0000 -.1620  
480.0000 -.1620  
500.0000 -.1620  
520.0000 -.1620  
540.0000 -.1620  
560.0000 -.1620  
580.0000 -.1620  
600.0000 -.1620  
620.0000 -.1620  
640.0000 -.1620  
660.0000 -.1620  
680.0000 -.1620  
700.0000 -.1620  
720.0000 -.1620  
740.0000 -.1620  
760.0000 -.1620  
780.0000 -.1620  
800.0000 -.1620  
820.0000 -.1620  
840.0000 -.1620  
860.0000 -.1620  
880.0000 -.1620  
900.0000 -.1620  
920.0000 -.1620  
940.0000 -.1620  
960.0000 -.1620  
980.0000 -.1620  
1000.0000 -.1620

DATE 20 SEP 75

TABULATED PRESSURE DATA - 1A98  
AMES 97-757 1A9 ORA + S3 + T9 ORBITER FUSELAGE

(R80811)

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.390

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
00.000	1.9580	.9290	.4260	.0590	.0980	.1770			.0940		.0600	.0030	-.0020	.0040	-.0020
20.000			.5040	.1410	.1670	.2110			.1220		.0970	.0550	-.0010	.1330	.1240
40.000			.6680	.1540	.3960	.2540			.1140		.0990				
60.000			.7370	.1990	.4880	.4610			.3580		.0390				
80.000			.7820	.2240	.3610	.5070			.4680		.3510	.0170	.0010	.0980	.1900
100.000			.8020	.2910	.3210	.5320			.6260		.3570	.0750	.0010	.0790	.1660
120.000	1.3450		.8210	.3450	.3990	.5670			.8260		.3240	.0690	.0460	.0750	.1820
140.000										.2370					
160.000			.7860	.3660	.4520	.6560			1.0630		.1510	.0030	.0040	.0670	.1120
180.000								1.3050							
200.000									.9830		-.0020	.0350	.1120	.0790	.0580
220.000									.8360						
240.000															
260.000															
280.000															
300.000															
320.000															
340.000															
360.000															
380.000															
400.000															
420.000															
440.000															
460.000															
480.000															
500.000															
520.000															
540.000															
560.000															
580.000															
600.000															
620.000															
640.000															
660.000															
680.000															
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740.000															
760.000															
780.000															
800.000															
820.000															
840.000															
860.000															
880.000															
900.000															
920.000															
940.000															
960.000															
980.000															
1000.000															

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.340

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
00.000	1.5810	.9560	.5010	.0630	.0590	.1820			.1020		.0700	.0140	.0390	.0550	.0490
20.000			.5480	.1470	.1020	.2140			.1160		.0840	.0250	.0110	.0180	.0190
40.000			.6650	.1430	.2950	.2650			.1200		.2910				
60.000			.7070	.1830	.3480	.4430			.3480		.3330	.0750	-.0070	.0530	.0540
80.000			.7360	.1990	.2820	.4870			.4560		.3260	.0560	.0210	.0390	.0350
100.000	1.3010		.7480	.2470	.2610	.5020			.5980		.3150	.0480	.0120	.0520	.0730
120.000			.7820	.3190	.3500	.5420			.7330						



AMES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE

(1500)

$\text{BATCH} (2) = 2.0000$        $\text{BETAT} (2) = -6.340$

## SECTION: (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.1510					
150.000		.7700	.3460	.4260	.7970			1.0260		.1380	.0410	.0000	.0550	.0460	
157.000							1.2790								
162.000								.9510							
165.000								.8440		-.0680	.1080	.0380	.0670	.0440	
169.000															
172.000															
180.000	1.5810	1.2430	.6230	.3450	.3990	.8470	1.3350								
184.000								1.0850		-.1130	-.0570	.0260	-.0290	.0340	
X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9637	1.0015	1.0392					

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

[illegible]



DATE 20 SEP 73

ADJUSTED PRESSURE DATA - 1A95

(RBC811)

AVES 97-707 1A9 C2A + S3 + 19 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -1.80

SECTION ( 1 ) ORBITER FUSELAGE  
X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9839 1.0015 1.0392

PHI  
70.000 .0310 .0190 .0230 .0730 .0630 .0300 .0070  
75.000 .0560 .0260 .1240 .0760 .0720 .0120 -.0780  
80.000 .1050 .0500 .1500 .1100 .0690 -.0070 -.0250  
85.000 .0720 .0340 .2940 .1100 -.0180 -.0010 .0290  
90.000 .0810 .0620 .0610 .0100 .0690 .0970  
95.000 .0610 .0660 .3270 .4950 .1500 .1780 .1530  
100.000 .0580 .0360 .3160 .5560 .3480 .2740 .0670  
105.000 .0520 .0720 .0710

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930

SECTION ( 1 ) ORBITER FUSELAGE  
X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI  
110.000 1.5940 .9870 .5500 .0580 .0130 .1940  
115.000 .4960 .0670 .0240 .1810  
120.000 .4750 .0680 .0380 .1620  
125.000 .4430 .0660 .0670 .1790  
130.000 .4210 .0460 .0310 .1480  
135.000 .4380 .0220 .0270 .1440  
140.000 .5260 .1440 .1490 .1310  
145.000 .6170 .2590 .3100 .4910  
150.000 .9660  
155.000 .7370  
160.000 .8240  
165.000 1.0770  
170.000 1.0015 1.0392

PHI  
175.000 .0390  
180.000 -.0020  
185.000 .0340  
190.000 .0490  
195.000 .1000  
200.000 .0400  
205.000 .0340  
210.000 .0360  
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1000.000 .0360















DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A9B

(RB0812)

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 5.930

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PMI										
70.000	-.0700	-.0670	-.0420	.0180	-.0350	-.0710	-.0090			
90.000	-.0430	-.0550	.0360	-.0280	-.0610	-.1130	.0280			
105.000			.0560	-.0270	-.0620	-.1390	-.0100			
110.000								-.0010		
120.000	-.0140	-.0460	.1140	-.0260	-.2100	-.1510	-.0270	-.0090		
135.000			.7230	.3230	-.1460	-.1360	-.1380			
150.000	-.0100	-.0070	.2740	.4370	.0660	.0120	-.0480			
165.000	-.0570	.3460	.5250	.1460	.0540	-.1380				
180.000	-.0480	-.0270	.1950							

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.980

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0375	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2711	.3200	.3953	.5120
PMI														
.000	1.4220	.9920	.4620	-.0760	.1250	.0150								
25.000			.4020	-.0850	.0120	.0180								
40.000			.3570	-.0940	-.0310	.0230								
55.000			.3150	-.1050	-.0710	.0580								
70.000			.2620	-.1250	-.1150	.1550								
90.000	.7940		.2380	-.1630	-.1110	.2170								
120.000			.2830	-.1680	-.0050	.3570								
142.000			.3660	.0570	.1620	.5820								
150.000							.6370							
162.000														
165.000														
169.000														
172.000														
180.000	1.4220	.9980	.3950	.1890	.3020	.8940								
							1.0000							
X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392				

X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PMI										
.000	-.1560	.0100	.0190	.0380	.1120	.0190	-.0340	-.0600		
40.000	-.1520	-.0620	.0190	.0380	.1120	.0190	-.0340	-.0600		
70.000		-.0510	.0430	.1110	.0650	-.0620	-.0520			
90.000			.0870	.0120	-.1420	-.1580	-.0590			
105.000								.0190		
110.000										
120.000	-.0340	-.0350	.2810	.0240	-.1830	-.0920	-.0670	-.0430		
135.000			.7750	.3770	-.1380	-.1210	-.1260			
150.000	-.0820	-.0740	.1460	.3340	.1270	.0390	-.0110			

AVES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

(R50012)

MACH (1) = 1.555 BETAT (6) = 5.980

## SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PMI

165.000 -.1040 .2940 .4580 .1530 .0680 -.1330  
180.000 -.1210 -.0370 .1180

MACH (1) = 1.555 BETAT (7) = 6.020

## SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .4000 .5075 .6189 .7380 .8283 .9262 .1035 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PMI

.5000 1.4030 .9780 .4660 -.0600 .1620 -.0280  
20.000 .3770 -.0850 .1070 -.0590  
40.000 .3090 -.0870 -.0770 -.0640  
55.000 .2510 -.1250 -.1300 .0660  
70.000 .1960 -.1970 -.1790 .1280  
90.000 .7290 .1730 -.2080 -.1700 .2170  
120.000 .2250 -.1090 -.0460 .2140  
140.000 .3160 .0370 .1360 .5020  
157.000 .5930  
162.00  
165.000  
169.000  
172.000  
180.000 1.4030 .9870 .3750 .1810 .3060 .8280  
190.000 .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PMI

.5000 -.1500  
40.000 -.0930  
70.000 -.0220 -.0240 -.0070 .0580 -.0160 -.0790 -.1130  
90.000 .0010 -.0310 .0890 .0090 -.1100 -.0970  
105.000 .0610 -.0400 -.0520 -.1300 -.1090  
110.000  
120.000 .0130 -.0120 .2040 -.0680 -.2430 -.1630 -.1460 -.1070  
135.000 .7650 .3660 -.1620 -.1780 -.1990  
150.000 -.1300 -.1110 .1630 .2240 .0860 -.0190 -.0740  
165.000 -.0810 .2770 .3940 .0750 -.0050 -.1840  
180.000 -.2050 -.0560 .1260





AMES 97-757 1A9 CEA + S3 + T9 ORBITER FUSELAGE

(RECB12)

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.240

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0100 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

100.000 1.5090 1.1300 .5030 .2760 .3070 .6500 .9980 -.1480 -.0990 -.0250 -.0560 -.0710

X/LB

.5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.0000 .0120 .0200 .1040 .0290 -.0390 -.1580 -.1670 -.1120

40.000 .0550 .0200 .0200 .0510 .0270 .0080 .0020

70.000 .0120 .0120 .0120 .0120 .0120 .0120 .0120

90.000 .0120 .0120 .0120 .0120 .0120 .0120 .0120

110.000 .0120 .0120 .0120 .0120 .0120 .0120 .0120

120.000 .0120 .0120 .0120 .0120 .0120 .0120 .0120

130.000 .0120 .0120 .0120 .0120 .0120 .0120 .0120

140.000 .0120 .0120 .0120 .0120 .0120 .0120 .0120

150.000 .0120 .0120 .0120 .0120 .0120 .0120 .0120

160.000 .0120 .0120 .0120 .0120 .0120 .0120 .0120

170.000 .0120 .0120 .0120 .0120 .0120 .0120 .0120

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0100 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

100.000 1.5090 .9360 .4780 .0670 .0320 .2130 .1890 .1760 .0780 .0370 .0300 .0360

20.000 .4700 .1030 .0300 .2010 .1240 .1150 .1120 .1020 .0820 .0270 .0300 .0320

40.000 .5030 .1030 .1360 .2310 .1150 .1150 .1120 .1020 .0820 .0270 .0300 .0320

50.000 .5030 .1030 .1360 .2310 .1150 .1150 .1120 .1020 .0820 .0270 .0300 .0320

70.000 .5030 .1030 .1360 .2310 .1150 .1150 .1120 .1020 .0820 .0270 .0300 .0320

90.000 .5030 .1030 .1360 .2310 .1150 .1150 .1120 .1020 .0820 .0270 .0300 .0320

110.000 .5030 .1030 .1360 .2310 .1150 .1150 .1120 .1020 .0820 .0270 .0300 .0320

120.000 .5030 .1030 .1360 .2310 .1150 .1150 .1120 .1020 .0820 .0270 .0300 .0320

130.000 .5030 .1030 .1360 .2310 .1150 .1150 .1120 .1020 .0820 .0270 .0300 .0320

140.000 .5030 .1030 .1360 .2310 .1150 .1150 .1120 .1020 .0820 .0270 .0300 .0320

150.000 .5030 .1030 .1360 .2310 .1150 .1150 .1120 .1020 .0820 .0270 .0300 .0320

160.000 .5030 .1030 .1360 .2310 .1150 .1150 .1120 .1020 .0820 .0270 .0300 .0320

170.000 .5030 .1030 .1360 .2310 .1150 .1150 .1120 .1020 .0820 .0270 .0300 .0320

180.000 .5030 .1030 .1360 .2310 .1150 .1150 .1120 .1020 .0820 .0270 .0300 .0320

PHI

100.000 .0440 .0260 -.0090 -.0360 -.0910 -.1090 -.1860 -.1250 -.0920

40.000 .0440 .0260 -.0090 -.0360 -.0910 -.1090 -.1860 -.1250 -.0920

AMC 92-07-1A0 2A + 3 + 6 + 9 + 12 + 15 + 18 + 21 + 24 + 27 + 30 + 33 + 36 + 39 + 42 + 45 + 48 + 51 + 54 + 57 + 60 + 63 + 66 + 69 + 72 + 75 + 78 + 81 + 84 + 87 + 90 + 93 + 96 + 99 + 102 + 105 + 108 + 111 + 114 + 117 + 120 + 123 + 126 + 129 + 132 + 135 + 138 + 141 + 144 + 147 + 150 + 153 + 156 + 159 + 162 + 165 + 168 + 171 + 174 + 177 + 180 + 183 + 186 + 189 + 192 + 195 + 198 + 201 + 204 + 207 + 210 + 213 + 216 + 219 + 222 + 225 + 228 + 231 + 234 + 237 + 240 + 243 + 246 + 249 + 252 + 255 + 258 + 261 + 264 + 267 + 270 + 273 + 276 + 279 + 282 + 285 + 288 + 291 + 294 + 297 + 300 + 303 + 306 + 309 + 312 + 315 + 318 + 321 + 324 + 327 + 330 + 333 + 336 + 339 + 342 + 345 + 348 + 351 + 354 + 357 + 360 + 363 + 366 + 369 + 372 + 375 + 378 + 381 + 384 + 387 + 390 + 393 + 396 + 399 + 402 + 405 + 408 + 411 + 414 + 417 + 420 + 423 + 426 + 429 + 432 + 435 + 438 + 441 + 444 + 447 + 450 + 453 + 456 + 459 + 462 + 465 + 468 + 471 + 474 + 477 + 480 + 483 + 486 + 489 + 492 + 495 + 498 + 501 + 504 + 507 + 510 + 513 + 516 + 519 + 522 + 525 + 528 + 531 + 534 + 537 + 540 + 543 + 546 + 549 + 552 + 555 + 558 + 561 + 564 + 567 + 570 + 573 + 576 + 579 + 582 + 585 + 588 + 591 + 594 + 597 + 600 + 603 + 606 + 609 + 612 + 615 + 618 + 621 + 624 + 627 + 630 + 633 + 636 + 639 + 642 + 645 + 648 + 651 + 654 + 657 + 660 + 663 + 666 + 669 + 672 + 675 + 678 + 681 + 684 + 687 + 690 + 693 + 696 + 699 + 702 + 705 + 708 + 711 + 714 + 717 + 720 + 723 + 726 + 729 + 732 + 735 + 738 + 741 + 744 + 747 + 750 + 753 + 756 + 759 + 762 + 765 + 768 + 771 + 774 + 777 + 780 + 783 + 786 + 789 + 792 + 795 + 798 + 801 + 804 + 807 + 810 + 813 + 816 + 819 + 822 + 825 + 828 + 831 + 834 + 837 + 840 + 843 + 846 + 849 + 852 + 855 + 858 + 861 + 864 + 867 + 870 + 873 + 876 + 879 + 882 + 885 + 888 + 891 + 894 + 897 + 900 + 903 + 906 + 909 + 912 + 915 + 918 + 921 + 924 + 927 + 930 + 933 + 936 + 939 + 942 + 945 + 948 + 951 + 954 + 957 + 960 + 963 + 966 + 969 + 972 + 975 + 978 + 981 + 984 + 987 + 990 + 993 + 996 + 999 + 1002 + 1005 + 1008 + 1011 + 1014 + 1017 + 1020 + 1023 + 1026 + 1029 + 1032 + 1035 + 1038 + 1041 + 1044 + 1047 + 1050 + 1053 + 1056 + 1059 + 1062 + 1065 + 1068 + 1071 + 1074 + 1077 + 1080 + 1083 + 1086 + 1089 + 1092 + 1095 + 1098 + 1101 + 1104 + 1107 + 1110 + 1113 + 1116 + 1119 + 1122 + 1125 + 1128 + 1131 + 1134 + 1137 + 1140 + 1143 + 1146 + 1149 + 1152 + 1155 + 1158 + 1161 + 1164 + 1167 + 1170 + 1173 + 1176 + 1179 + 1182 + 1185 + 1188 + 1191 + 1194 + 1197 + 1200 + 1203 + 1206 + 1209 + 1212 + 1215 + 1218 + 1221 + 1224 + 1227 + 1230 + 1233 + 1236 + 1239 + 1242 + 1245 + 1248 + 1251 + 1254 + 1257 + 1260 + 1263 + 1266 + 1269 + 1272 + 1275 + 1278 + 1281 + 1284 + 1287 + 1290 + 1293 + 1296 + 1299 + 1302 + 1305 + 1308 + 1311 + 1314 + 1317 + 1320 + 1323 + 1326 + 1329 + 1332 + 1335 + 1338 + 1341 + 1344 + 1347 + 1350 + 1353 + 1356 + 1359 + 1362 + 1365 + 1368 + 1371 + 1374 + 1377 + 1380 + 1383 + 1386 + 1389 + 1392 + 1395 + 1398 + 1401 + 1404 + 1407 + 1410 + 1413 + 1416 + 1419 + 1422 + 1425 + 1428 + 1431 + 1434 + 1437 + 1440 + 1443 + 1446 + 1449 + 1452 + 1455 + 1458 + 1461 + 1464 + 1467 + 1470 + 1473 + 1476 + 1479 + 1482 + 1485 + 1488 + 1491 + 1494 + 1497 + 1500 + 1503 + 1506 + 1509 + 1512 + 1515 + 1518 + 1521 + 1524 + 1527 + 1530 + 1533 + 1536 + 1539 + 1542 + 1545 + 1548 + 1551 + 1554 + 1557 + 1560 + 1563 + 1566 + 1569 + 1572 + 1575 + 1578 + 1581 + 1584 + 1587 + 1590 + 1593 + 1596 + 1599 + 1602 + 1605 + 1608 + 1611 + 1614 + 1617 + 1620 + 1623 + 1626 + 1629 + 1632 + 1635 + 1638 + 1641 + 1644 + 1647 + 1650 + 1653 + 1656 + 1659 + 1662 + 1665 + 1668 + 1671 + 1674 + 1677 + 1680 + 1683 + 1686 + 1689 + 1692 + 1695 + 1698 + 1701 + 1704 + 1707 + 1710 + 1713 + 1716 + 1719 + 1722 + 1725 + 1728 + 1731 + 1734 + 1737 + 1740 + 1743 + 1746 + 1749 + 1752 + 1755 + 1758 + 1761 + 1764 + 1767 + 1770 + 1773 + 1776 + 1779 + 1782 + 1785 + 1788 + 1791 + 1794 + 1797 + 1800 + 1803 + 1806 + 1809 + 1812 + 1815 + 1818 + 1821 + 1824 + 1827 + 1830 + 1833 + 1836 + 1839 + 1842 + 1845 + 1848 + 1851 + 1854 + 1857 + 1860 + 1863 + 1866 + 1869 + 1872 + 1875 + 1878 + 1881 + 1884 + 1887 + 1890 + 1893 + 1896 + 1899 + 1902 + 1905 + 1908 + 1911 + 1914 + 1917 + 1920 + 1923 + 1926 + 1929 + 1932 + 1935 + 1938 + 1941 + 1944 + 1947 + 1950 + 1953 + 1956 + 1959 + 1962 + 1965 + 1968 + 1971 + 1974 + 1977 + 1980 + 1983 + 1986 + 1989 + 1992 + 1995 + 1998 + 2001 + 2004 + 2007 + 2010 + 2013 + 2016 + 2019 + 2022 + 2025 + 2028 + 2031 + 2034 + 2037 + 2040 + 2043 + 2046 + 2049 + 2052 + 2055 + 2058 + 2061 + 2064 + 2067 + 2070 + 2073 + 2076 + 2079 + 2082 + 2085 + 2088 + 2091 + 2094 + 2097 + 2100 + 2103 + 2106 + 2109 + 2112 + 2115 + 2118 + 2121 + 2124 + 2127 + 2130 + 2133 + 2136 + 2139 + 2142 + 2145 + 2148 + 2151 + 2154 + 2157 + 2160 + 2163 + 2166 + 2169 + 2172 + 2175 + 2178 + 2181 + 2184 + 2187 + 2190 + 2193 + 2196 + 2199 + 2202 + 2205 + 2208 + 2211 + 2214 + 2217 + 2220 + 2223 +

$$\text{STAT}(\epsilon) = -0.171$$

mach 1.29 = 2.145

SECTION (1) ORBITER FUSELAGE

DIFFERENT VARIABLE CP

	0007	0008	9639	1.0015	1.0392
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70,000	- .0200	.0320	.0120	.0120	-.0080
90,000	.0010	-.0240	.0660	.0200	-.0500
105,000			.0980	.0280	-.0670
110,000				.0680	
120,000	.0210	.0390	.2400	.0970	-.0220
135,000			.5580	.3850	.0160
150,000	.0100	.0180	.2360	.0640	.1010
165,000	.0060		.2390	.4390	.0950
180,000	-.0020	.0120	.0250		

$$\text{BETAT} ( 5 ) = 3.921$$

3.921

SECTION ( ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

SECTION ( 27.000) PLAN ( 0.000)															
X/L9	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3653	.5120
FMI															
.0000	1.51820	.9050	.4140	.0630	.0300	.1910			.1230		.1260	.0560	.0340	-.0280	.5120
27.0000		.3960	.0700	.0240	.1820				.1610		.1180		-.0080	-.0330	-.0290
40.0000		.3890	.0690	.0630	.1610				.1350		.0930	.0370			
55.0000		.3790	.0530	.0620	.1690				.1740		.1790				
70.0000		.3690	-.0130	.1170					.2450		.1780	-.0280	-.1030	-.0840	-.0090
90.0000	.9180		.3840	-.0150	.1220				.2810		.1470	-.0590	-.0930	-.1880	-.0170
120.0000		.6440	.0930	.0840	.0770				.1700		.0050	-.0850	-.0780	-.0510	-.0350
142.0000		.5150	.1780	.2210	.3290				.6130		-.1300	-.1490	.0000	.0080	-.0100
180.0000								.8380							
197.0000									.6640		-.1780	-.1370	-.0820	.0090	-.0240
169.0000									.7360						
172.0000	1.5020	1.1360	.5170	.2700	.3050	.6340	1.0280		.9710		-.1370	-.0970	-.0440	-.0470	-.0170

872

PMI					
0100	.0120				-.1690
40.000	-.0230	-.0260	-.1350	-.1720	-.1950
70.000		-.0190	-.0360	-.0210	-.0540
90.000		-.0240	-.0390	-.0120	-.0540
105.000			.0490	.0210	-.0150
110.000					-.0780
120.000		-.0180	-.0100	.0120	-.0880
135.000			.6450	.3600	-.0720
150.000		-.0320	-.0260	.6970	.0980
					.0550
					.0200
					.0330
					.0170
					-.0630
					-.0640
					.0200

DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A98

(R80812)

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.920

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
165.0000 -.0410 .2030 .5080 .1780 .0990 -.0280  
180.0000 -.0170 -.0150 .1100

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.960

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0073 .0188 .0339 .0612 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI  
20.0000 1.4910 .9240 .4750 .1010 .0210 .1840 .0630  
25.0000 .4290 .0670 .1660 .0070 .1660 .0820  
30.0000 .3680 .0660 .0500 .1290 .0740 .0450 .0320 .0490 .0450  
35.0000 .3450 .0440 .0130 .1020 .1600 .1600  
40.0000 .3130 .0550 .0470 .0740 .1270 .1690 .0350 .1190 .0970 .0120  
45.0000 .3160 .0540 .0480 .0540 .1760 .1200 .1050 .1020 .0250  
50.0000 .3860 .0900 .0430 .0370 .0760 .1800 .1730 .1880 .0470 .0560  
55.0000 .4720 .1520 .1840 .4330 .5490 .1550 .1720 .0000 .0260 .0480  
60.0000 .6370 .8320 .6370  
65.0000 .7240 .1920 .1490 .0940 .0950 .0660  
70.0000 .9480 .1470 .1090 .0440 .1080 .0430  
75.0000 1.0440 .8263 .7869 .9262 .9639 1.0015 1.0392

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
40.0000 -.0130  
45.0000 -.0900  
50.0000 -.0280  
55.0000 -.0260  
60.0000 -.0190  
65.0000 -.0470  
70.0000 .0080  
75.0000 .0390  
80.0000 .0390  
85.0000 .0390  
90.0000 .0390  
95.0000 .0390  
100.0000 .0390  
105.0000 .0390  
110.0000 .0390  
115.0000 .0390  
120.0000 .0390  
125.0000 .0390  
130.0000 .0390  
135.0000 .0390  
140.0000 .0390  
145.0000 .0390  
150.0000 .0390  
155.0000 .0390  
160.0000 .0390  
165.0000 .0390  
170.0000 .0390  
175.0000 .0390  
180.0000 .0390





DATE 20 SEP 75

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 OCA + S3 + T9 ORBITER FUSELAGE

(RBOB13) ( 24 MAY 75 )

REFERENCE DATA

SREF = 2.4210 94.FT. XMRP = 28.5350 INCHES  
LREF = 38.6490 INCHES YMRP = .0000 INCHES  
BREF = 39.6490 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.310

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .0075 .0168 .0336 .0632 .1355 .1506 .1981 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI	.000	1.3480	.9930	.4940	-.07810	.1283	-.0310	-.0850	-.1130	-.1570	-.0340	-.0620	-.0520
20.000				.5950	.0710	.1320	-.0170	-.0860	-.1190	-.1200	.0910	.0220	.0360
40.000				.7720	.1970	.3290	.0240	-.1020	.1540	.0910	.0910	.0570	.0570
55.000				.8340	.3230	.4490	.2230	.1200	.1610	-.1120	-.1560	.0570	.0570
70.000				.8160	.3670	.4290	.2580	.2190	.1280	-.1330	-.1540	.0130	.0170
90.000				1.2140	.7315	.2980	.4310	.3870	.0550	-.1620	-.1430	-.0980	-.0400
120.000				.5920	.2320	.3910	.3330	.5580	.0630	-.1120	.0020	-.1450	-.0460
142.000				.4840	.1080	.3780	.7420	.7180	-.1830	-.0760	-.1280	-.1240	-.1280
150.000								.6300	-.3670	-.2580	-.2140	-.3040	-.1560
157.000								.4480					
162.000								.6680					
169.000								1.0610					
172.000				.2910	.0830	.1970	.6060	.9639	1.0015	1.0092			
180.000				.6580	.8283	.8848	.9262						
X/LB	.5973	.6626	.7560	.7869	.8283	.8848	.9262						
PHI	-.1190	.3730	.3250	.1960	-.0220	-.2670	-.1430						
40.000				.3250	.1960	-.0220	-.2670						
70.000				-.0670	-.1140	.0120	.0110						
90.000				-.0650	-.0690	.0360	-.0300						
105.000				.2020	.1720	.0410	-.0750						
110.000				.5620	.2250	-.0140	-.0340						
120.000				.3450	.2550	-.1390	-.0960						
135.000				.1290	.1140	-.0760	.1410						
150.000				-.0490	-.0450	.1290	.2150						
165.000				-.0620	.1750	.3430	.0050						
180.000				-.1350	-.0920	.1280							

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500  
RUDDER = -15.000 ELEVON = .000  
RUFLR = .000



DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE (R0813)

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1956	.2259	.2711	.3200	.3953	.5120
PHI															
142.000															
150.000															
157.500															
162.000															
165.000															
169.000															
172.000															
180.000															
1.3790	.8870	.3090	.1010	.1920	.7640		1.0490								
1.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						

PHI															
142.000															
150.000															
157.500															
162.000															
165.000															
169.000															
172.000															
180.000															

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -1.140

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1956	.2259	.2711	.3200	.3953	.5120
PHI															
142.000															
150.000															
157.500															
162.000															
165.000															
169.000															
172.000															
180.000															
1.3790	.8870	.3090	.1010	.1920	.7640		1.0490								
1.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						

1.0490

DATE 2. SEP 73

**TABIN ATFC PRESSURE DATA - 1A98**

02-717 1A9 02A + S3 + T9 ORBITER FUSELAGE

(RB-813)

$$\text{BETAY}(\epsilon) = -.140$$
$$\text{BETAY} (2) = -.140$$

### SECTION 1: ORBITER FUSELAGE

DEPENDENT VARIABLE CP

[illegible]
$$\text{MACH} (1) = 1.555$$

BETAT ( 5 ) = 3.940

## SECTION C ORBITER FUSELAGE

**DEPENDENT VARIABLE CP**

[illegible]

DATE 20 SEP 73

## TABULATED PRESSURE DATA - 1A9B

(RDCB13)

ANES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555

BETAT ( 5 ) = 3.940

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7385 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

70.000 -.1020 -.0970 -.0900 -.0270 .0170 -.0350 -.0580

75.000 -.0700 -.0680 .0160 -.0550 -.0420 -.0330 -.0570

80.000 .0480 -.0300 -.0640 -.0630 -.0580

85.000 -.0280 -.0320 .1790 -.0290 -.1660 -.1090 -.0620

90.000 -.0180 -.0310 .6300 .3130 -.1550 -.0410 -.0440

95.000 -.0580 -.0790 .3020 .3510 .0570 -.0350 -.0210

100.000 -.0860 -.0790 .3130 .4840 .1920 .0180 -.1630

105.000

110.000

115.000

120.000

125.000

130.000

135.000

140.000

145.000

150.000

MACH ( 1 ) = 1.555

BETAT ( 6 ) = 5.990

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1546 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

20.000 1.3780 1.0200 .4910 -.0570 .1240 .0110

25.000 .4380 -.0690 -.0160 .0010

30.000 .3940 -.0790 -.0470 .0160

35.000 .3470 -.0820 -.0930 .0660

40.000 .2750 -.1230 -.1240 .1240

45.000 .7780 .2310 -.1700 .1190 .1710

50.000 .2300 -.1020 .3660

55.000

60.000

65.000

70.000

75.000

80.000

85.000

90.000

95.000

100.000

105.000

110.000

115.000

120.000

125.000

130.000

135.000

140.000

145.000

150.000

PHI

40.000 -.1200

45.000 -.1320

50.000 .1240

55.000 -.0260

60.000 .0350

65.000 .0350

70.000 .0350

75.000 .0350

80.000 .0350

85.000 .0350

90.000 .0350

95.000 .0350

100.000 .0350

105.000 .0350

110.000 .0350

115.000 .0350

120.000 .0350

125.000 .0350

130.000 .0350

135.000 .0350

140.000 .0350

145.000 .0350

150.000 .0350

PHI

40.000 -.0460

45.000 -.0650

50.000 .0670

55.000 .0670

60.000 .0670

65.000 .0670

70.000 .0670

75.000 .0670

80.000 .0670

85.000 .0670

90.000 .0670

95.000 .0670

100.000 .0670

105.000 .0670

110.000 .0670

115.000 .0670

120.000 .0670

125.000 .0670

130.000 .0670

135.000 .0670

140.000 .0670

145.000 .0670

150.000 .0670

STAT ( 6 ) = 5.9993

SECTION ( 1 ) ORBITE? FUSELAGE	DEPENDENT VARIABLE CP
1.0015	1.0392
0.9639	0.9669

PHI					
165.1420	- .1060	.3130	.4930	.1470	.0530
	- .2160	- .0610	.1090		- .1380

BETAT ( 7 ) = 8.030

DEPENDENT VARIABLE CP

X/LB	5.0000	5.075	5.0188	5.0339	5.0612	5.1555	5.1350	5.0000
FMI								
1.000	1.3570	.9980	.4820	-.0540	.1570	-.0370	-.0990	-.0630
20.000			.4010	-.0830	.1150	-.0560	-.0960	-.0630
40.000			.3320	-.0580	-.0750	-.0540	-.0540	-.0630
55.000			.2680	-.1110	-.1440	-.0270	.0710	-.0430
70.000			.1980	-.1690	-.1790	.1030	.1720	.0310
85.000		.7010	.1510	-.2180	-.1780	.1750	.2040	.0230
100.000			.1680	-.1410	-.0930	.3070	.1210	-.0230
120.000							-.3300	-.1780
140.000			.2430	-.0380	.0670	.4060	.3510	-.1890
150.000							.5870	-.1890
157.000								-.1890
162.000								-.1890
165.000								-.1890
169.000								-.1890
172.000								-.1890
180.000	1.9500	.6780	.2850	.0880	.2150	.6440	.9170	-.1730
							.6450	-.1730
							.9639	-.1730
							1.0015	1.0392
5.000	.5873	.6626	.7380	.7869	.8283	.8848	.9262	1.0392

PMI	-1200	-1140	-1080
60,000	-	-	-
65,000	0.070	-0.050	-0.080
70,000	-0.030	-0.070	-0.100
75,000	-0.010	-0.040	-0.070
80,000	-0.010	-0.040	-0.070
85,000	-0.010	-0.040	-0.070
90,000	-0.010	-0.040	-0.070
95,000	-0.010	-0.040	-0.070
100,000	-0.010	-0.040	-0.070
105,000	-0.010	-0.040	-0.070
110,000	-0.010	-0.040	-0.070
115,000	-0.010	-0.040	-0.070
120,000	-0.010	-0.040	-0.070
125,000	-0.010	-0.040	-0.070
130,000	-0.010	-0.040	-0.070
135,000	-0.010	-0.040	-0.070
140,000	-0.010	-0.040	-0.070
145,000	-0.010	-0.040	-0.070
150,000	-0.010	-0.040	-0.070
155,000	-0.010	-0.040	-0.070
160,000	-0.010	-0.040	-0.070
165,000	-0.010	-0.040	-0.070
170,000	-0.010	-0.040	-0.070
175,000	-0.010	-0.040	-0.070
180,000	-0.010	-0.040	-0.070
185,000	-0.010	-0.040	-0.070
190,000	-0.010	-0.040	-0.070
195,000	-0.010	-0.040	-0.070
200,000	-0.010	-0.040	-0.070
205,000	-0.010	-0.040	-0.070
210,000	-0.010	-0.040	-0.070
215,000	-0.010	-0.040	-0.070
220,000	-0.010	-0.040	-0.070
225,000	-0.010	-0.040	-0.070
230,000	-0.010	-0.040	-0.070
235,000	-0.010	-0.040	-0.070
240,000	-0.010	-0.040	-0.070
245,000	-0.010	-0.040	-0.070
250,000	-0.010	-0.040	-0.070
255,000	-0.010	-0.040	-0.070
260,000	-0.010	-0.040	-0.070
265,000	-0.010	-0.040	-0.070
270,000	-0.010	-0.040	-0.070
275,000	-0.010	-0.040	-0.070
280,000	-0.010	-0.040	-0.070
285,000	-0.010	-0.040	-0.070
290,000	-0.010	-0.040	-0.070
295,000	-0.010	-0.040	-0.070
300,000	-0.010	-0.040	-0.070
305,000	-0.010	-0.040	-0.070
310,000	-0.010	-0.040	-0.070
315,000	-0.010	-0.040	-0.070
320,000	-0.010	-0.040	-0.070
325,000	-0.010	-0.040	-0.070
330,000	-0.010	-0.040	-0.070
335,000	-0.010	-0.040	-0.070
340,000	-0.010	-0.040	-0.070
345,000	-0.010	-0.040	-0.070
350,000	-0.010	-0.040	-0.070
355,000	-0.010	-0.040	-0.070
360,000	-0.010	-0.040	-0.070
365,000	-0.010	-0.040	-0.070
370,000	-0.010	-0.040	-0.070
375,000	-0.010	-0.040	-0.070
380,000	-0.010	-0.040	-0.070
385,000	-0.010	-0.040	-0.070
390,000	-0.010	-0.040	-0.070
395,000	-0.010	-0.040	-0.070
400,000	-0.010	-0.040	-0.070
405,000	-0.010	-0.040	-0.070
410,000	-0.010	-0.040	-0.070
415,000	-0.010	-0.040	-0.070
420,000	-0.010	-0.040	-0.070
425,000	-0.010	-0.040	-0.070
430,000	-0.010	-0.040	-0.070
435,000	-0.010	-0.040	-0.070
440,000	-0.010	-0	

AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

(RBCB13)

MACH (2) = 2.000 BETAT (1) = -0.300

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP									
X/LB											
PHI											
.000	1.3680	.9140	.4880	.0970	.0920	.1520	.0590	.0250	-.0260	-.0670	-.0580
20.000			.5230	.1470	.2320	.1690	.0780	.0270	-.0030	-.0180	-.0150
40.000			.6800	.1610	.4940	.2130	.0970	.0390	-.0030	-.0180	-.0150
55.000			.7190	.1820	.6090	.3780	.2870	.2270	.0520	-.0340	.0210
70.000			.7430	.2070	.3340	.4100	.3280	.2780	.0520	-.0340	.0210
90.000			.7210	.2410	.2680	.4440	.4180	.2980	.0220	-.0250	-.0370
120.000	1.2240		.6620	.2420	.2520	.4300	.6860	.2160	-.0040	-.0520	-.0150
142.000			.5820	.2110	.2480	.4910	.8710	-.0150	-.0170	.0700	-.0340
150.000							1.0530				
157.000							.8080				
162.000							.6370				
165.000											
169.000											
172.000											
180.000	1.3680	.9640	.4040	.1780	.1950	.4820	.8360	-.0640	.0420	.0370	-.0260
X/LB	.9873	.6626	.7380	.7869	.8283	.8848	.9262	-.1790	-.1220	-.1460	-.2000
							1.0015				
							1.0392				

PHI											
.000	-.0480										
40.000	.1360										
70.000	.0090	-.0130	.0340	.0420	.0130	-.0010					
90.000	.0230	-.0060	.0540	.1080	.0810	-.0030					
105.000			.2120	.2070	.0830	.0140	-.0170				
110.000							.1230				
120.000	-.0110	-.0230	.5500	.2690	.0380	.0210	.0020				
135.000			.3110	.2800	-.0520	-.0890	-.0710				
150.000	-.0150	-.0130	.0800	.0760	-.1390	.0320	.0370				
165.000	.0110		.1270	.2600	.1360	.2110	.0740				
180.000	-.1260	-.1440	.0040								

MACH (2) = 2.000 BETAT (2) = -6.280

SECTION (1) ORBITER FUSELAGE		DEPENDENT VARIABLE CP									
X/LB											
PHI											
.000	1.4140	.9400	.5330	.1050	.0270	.1800	.0740	.0610	-.0080	-.0390	-.0580
20.000			.7590	.1640	.1210	.1870	.0870	.1620	-.0090	-.0170	-.0330
40.000			.6470	.1640	.3660	.2220	.0880	.0300	-.0090	-.0170	-.0330
55.000			.6750	.1860	.3690	.3590	.2630	.1890	.0230	-.0620	-.1270
70.000			.6830	.1870	.2450	.3820	.3050	.2530	.0230	-.0620	-.1270
90.000	1.1700		.6510	.1860	.2200	.3990	.3990	.2700	.0310	-.0490	-.0380
120.000			.6060	.2070	.2280	.3980	.6470	.1910	-.0240	-.0600	-.0540



DATE 20 SEP 73

EXTRAPOLATED PRESSURE DATA - 1A98

AVCS 97-707 1A9 Q2A + S3 + T9 ORBITER FUSELAGE

(0503013)

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000									.8420		.1030	-.0400	.0000	-.0350	-.0370
150.000			.5530	.1930	.2490	.4980									
157.000							1.0250		.7910		-.1070	.0150	-.0110	-.0460	-.0350
162.000									.6630						
165.000															
169.000								.9210			-.1870	-.1270	-.1090	-.1870	-.1020
172.000					.1730	.2120	.5480		.8710						
180.000	1.4140	.9850	.4080												
X/LB	.5873	.6626	.7380	.7869	.8233	.8848	.9262	.9639	1.0015	1.0392					

PHI -0.0600 -0.0880 -0.1180 -0.1530 -0.1910 -0.2310 -0.2710 -0.3110 -0.3510 -0.3910 -0.4310 -0.4710 -0.5110 -0.5510 -0.5910 -0.6310

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000									.1090		.1010	.0260	-.0180	-.0770	-.0790
20.000	1.4240	.9630	.5890	.1090	.0030	.2090			.0920		.0770	.0220	.0210	-.0320	.0510
40.000			.5840	.1820	.0510	.2170			.1050		.0220	.0260	-.0210	-.0320	.0510
60.000			.6350	.1800	.2180	.2410			.2350		.1620	-.0260	-.0470	-.0460	.0590
80.000			.6510	.2060	.2750	.3250			.2740		.2220	-.0260	-.0740	-.0640	-.0260
100.000			.6420	.2050	.2100	.3350			.3690		.2320	-.0270	-.0740	-.0640	-.0260
120.000			.6080	.1500	.1710	.3530			.5610		.1690	-.0430	-.0630	-.0720	-.0540
140.000	1.1340		.5800	.1870	.1870	.3620			.8120		.1070	-.0160	.0000	-.0460	-.0590
160.000			.5480	.1750	.2270	.4720			.7560						
180.000									.6670						
X/LB															

.9580

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98

(RECS13)

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP									
X/LB											
PHI											
181.140	1.4240	1.0180	.4250	.1900	.2150	.5170	.8860	-.1830	-.1410	-.0700	-.1250
											-.0840
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392	
PHI											
.140	-.0180							-.1110		-.0760	
40.000	.0470			.1220	.0600	-.0120	-.1120			-.1000	
70.000	-.0360	-.0650	-.0840	-.0170	-.0680	-.0410	-.0390				
90.000	-.0090	-.0480	.0300	.0240	.0310	-.0310	-.0390				
110.000		.1280	.1090	.0240	-.0430	-.0710					
120.000	-.0150	-.0280	.3550	.1910	-.0020	-.0340	-.0390	.0790			
130.000		.3360	.3380	-.0180	-.0520	.0720		.0630			
150.000	-.0130	-.0160	.1750	-.0660	.0670	.1070					
160.000	-.0150		.1470	.2710	.1740	.1690	.0170				
180.000	-.0660	-.0560									

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.140

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP									
X/LB											
PHI											
.000	1.4400	.9570	.5720	.1120	.0150	.2690	.2090	.1570	.0500	-.0010	-.0780
20.000		.5530	.1520	.0340	.2250		.1630	.1460			-.0250
40.000		.5560	.1500	.1330	.2330		.1140	.0680	.0420	-.0090	-.0070
50.000		.5270	.1570	.1630	.2530		.1880	.1310			
70.000		.5030	.1030	.1070	.2480		.2320	.1790	-.0340	-.1000	-.0820
90.000	1.0040	.4780	.0570	.0730	.2520		.3370	.1790	-.0500	-.1010	-.0510
120.000		.4850	.1150	.1080	.1960		.4270	.1390	-.0690	-.0770	-.0880
140.000											
160.000		.4950	.1450	.1850	.3980		.6890	-.0540	-.0990	.0000	-.1450
180.000											
PHI							.8610				
172.140	1.4400	1.0280	.4260	.1940	.2180	.4710	.6580	-.1780	-.1050	-.1240	-.0190
180.000							.6670				
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392	
PHI											
.000	.0620										-.0750
40.000	.0330	.0260		-.0210	-.0640	-.0870	-.1690	-.1030			-.1040

2000

---LAVED PRESSURE DATA - 1:23

(REG-913)

100-97-717 1A3 02A + S3 + 79 0F91 TER FUSELAGE

SECRET - 07-0

$$\max_{\mathbf{z}} \mathcal{L}(\mathbf{z}) = 2.1$$
DEPENDENT VARIABLE C<sup>2</sup>

	0000	0001	0002	0003	0004	0005	0006	0007	0008	0009	0010	0011	0012	0013	0014	0015	0016	0017	0018	0019	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	0030	0031	0032	0033	0034	0035	0036	0037	0038	0039	0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	0050	0051	0052	0053	0054	0055	0056	0057	0058	0059	0060	0061	0062	0063	0064	0065	0066	0067	0068	0069	0070	0071	0072	0073	0074	0075	0076	0077	0078	0079	0080	0081	0082	0083	0084	0085	0086	0087	0088	0089	0090	0091	0092	0093	0094	0095	0096	0097	0098	0099
0000	0001	0002	0003	0004	0005	0006	0007	0008	0009	0010	0011	0012	0013	0014	0015	0016	0017	0018	0019	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	0030	0031	0032	0033	0034	0035	0036	0037	0038	0039	0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	0050	0051	0052	0053	0054	0055	0056	0057	0058	0059	0060	0061	0062	0063	0064	0065	0066	0067	0068	0069	0070	0071	0072	0073	0074	0075	0076	0077	0078	0079	0080	0081	0082	0083	0084	0085	0086	0087	0088	0089	0090	0091	0092	0093	0094	0095	0096	0097	0098	0099	

**Index**

[illegible]

**MACH (2) = 2.000**

$$\text{BETAT}(5) = 3.93$$

	DEPENDENT VARIABLE CP	INDEPENDENT VARIABLE AGE
CP	0.987	0.012
AGE	0.012	0.987

[illegible]

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PMI	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432
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DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A9B

PAGE 14R

AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

(R80813)

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6826 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

165.000 -.0650 .1670 .4220 .1190 .0470 -.0490

180.000 -.0570 -.0570 .0730

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CF

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

.000 1.4090 .9480 .5340 .1060 .0080 .1910 .0820 .0680 .0130 -.0320 -.0690 -.0410

20.000 .4830 .1000 -.0230 .1970 .0830 .0660 .0660 .0660 .0340 -.0740 -.1270 -.0550

40.000 .4270 .0980 -.0080 .1440 .1350 .1100 .1100 .1100 .0340 -.0740 -.1270 -.0550

55.000 .3610 .0860 .0060 .0610 .1280 .1370 .1370 .1370 .0610 -.1330 -.1320 -.0710

70.000 .3040 .0560 -.0360 .0410 .1640 .1370 .1370 .1370 .1150 -.0610 -.1260 -.0860

90.000 .2890 .0670 -.0550 .0270 .1470 .1150 .1150 .1150 .0670 -.1380 .1190 -.0820

120.000 .3250 .0080 .0000 .0150 .1170 .1170 .1170 .1170 .1170 .1170 .1170 .1170

142.000 .3830 .0840 .1130 .3300 .4520 .4520 .4520 .4520 .4520 .4520 .4520 .4520

150.000 .7700 .7700 .7700 .7700 .7700 .7700 .7700 .7700 .7700 .7700 .7700 .7700

157.000 .5490 .5490 .5490 .5490 .5490 .5490 .5490 .5490 .5490 .5490 .5490 .5490

162.000 .6300 .6300 .6300 .6300 .6300 .6300 .6300 .6300 .6300 .6300 .6300 .6300

165.000 .8450 .8450 .8450 .8450 .8450 .8450 .8450 .8450 .8450 .8450 .8450 .8450

169.000 .6300 .6300 .6300 .6300 .6300 .6300 .6300 .6300 .6300 .6300 .6300 .6300

172.000 .8430 .8430 .8430 .8430 .8430 .8430 .8430 .8430 .8430 .8430 .8430 .8430

180.000 1.0020 .4040 .1750 .2020 .5340 .8430 .8430 .8430 .8430 .8430 .8430 .8430

PHI

.000 -.0640 .5010 .1240 -.1140 -.1270 -.1530 -.1370 -.1370 -.1370 -.1370 -.1370 -.1370

40.000 -.0530 .5010 .1240 -.1140 -.1270 -.1530 -.1370 -.1370 -.1370 -.1370 -.1370 -.1370

70.000 -.0650 .5010 .1240 -.1140 -.1270 -.1530 -.1370 -.1370 -.1370 -.1370 -.1370 -.1370

90.000 -.0570 .5010 .1240 -.1140 -.1270 -.1530 -.1370 -.1370 -.1370 -.1370 -.1370 -.1370

105.000 -.0570 .5010 .1240 -.1140 -.1270 -.1530 -.1370 -.1370 -.1370 -.1370 -.1370 -.1370

110.000 -.0570 .5010 .1240 -.1140 -.1270 -.1530 -.1370 -.1370 -.1370 -.1370 -.1370 -.1370

120.000 -.0570 .5010 .1240 -.1140 -.1270 -.1530 -.1370 -.1370 -.1370 -.1370 -.1370 -.1370

135.000 -.0570 .5010 .1240 -.1140 -.1270 -.1530 -.1370 -.1370 -.1370 -.1370 -.1370 -.1370

150.000 -.0570 .5010 .1240 -.1140 -.1270 -.1530 -.1370 -.1370 -.1370 -.1370 -.1370 -.1370

165.000 -.0570 .5010 .1240 -.1140 -.1270 -.1530 -.1370 -.1370 -.1370 -.1370 -.1370 -.1370

180.000 -.0570 .5010 .1240 -.1140 -.1270 -.1530 -.1370 -.1370 -.1370 -.1370 -.1370 -.1370





DATE 20 SEP 73 TASCULATED PRESSURE DATA - 1A98  
 AMES 97-757 1A9 O2A + S3 + T9 CRIBITER FUSELAGE (RBO814)

MACH ( 1 ) = 1.555		BETAT ( 2 ) = -6.260														
SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP														
X/LB		.00205	.00775	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI																
.020	1.3050	1.1100	.5650	-.1400	-.1510	.0380			-.0030		-.0450	-.1160	-.1200	-.1060	-.0150	
20.020			.6890	.0240	-.0590	.0240			-.0760		.0040					
40.020			.8020	.1890	.2220	-.0070			-.1070		.0560	-.0630	-.0020	.0120	.0240	
55.020			.7840	.2290	.3280	.1470			.0540		.1970					
70.020			.7300	.2830	.3020	.1750			.1180		.1320	-.0890	-.1430	-.0470	-.0110	
90.020			.6180	.2020	.3110	.2080			.2820		.0730	-.1360	-.1550	-.0920	-.0530	
120.020	1.1190		.4690	.1240	.2560	.2330			.4590		-.0080	-.2040	-.1890	-.1530	-.1140	
142.020			.3650	.0130	.1810	.6220			.6250		-.1660	-.2170	.0000	-.1730	-.1090	
150.020								.9120								
157.020									.5500		-.2640	-.1430	-.1850	-.1480	-.1000	
162.020									.3980							
165.020																
169.020																
								.9520								

MACH ( 1 ) = 1.555		BETAT ( 3 ) = -4.220		DEPENDENT VARIABLE CP											
SECTION ( 1 ) ORBITER FUSELAGE															
X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.020	-.0420			.2870	.2610	-.0410	-.2730							-.0480	-.0150
40.020	.4030			-.1780	-.0680	-.0640	-.0820	-.0930							-.0120
70.020	-.1170			-.0870	-.0430	-.0150	-.1160	-.1190							
90.020	-.1020			-.0870	-.0790	-.0150	-.1290	-.1510							
105.020				.1380	.1320	-.0140									-.0090
110.020				.5290	.1790	-.0750	-.1110	-.1210							-.0500
120.020	-.1140			-.1310	.1580	-.2110	-.1550	.0110							
135.020				.2630	.1580	-.0770	.0510	.0540							
150.020	-.1060			-.0050	.0860	-.0770	.0510	.0540							
165.020	-.0640			.0070	.2620	.0980	.1050	-.1800							
180.020	-.1870			-.0450	.1150										

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP													
X/LB	.0020	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.020	1.3230	1.2260	5450	-.1360	-.1810	.0310		.0340		-.0520	-.1150	-.1430	-.0510	-.0260	
20.020			6680	-.0130	-.0740	.0690		-.0570		.0070					
40.020			7290	.1050	.1840	.0190		-.1020		-.0030	-.0770	.0210	-.0150		
55.020			.6910	.1910	.2660	.1270		.0300		.240	.240				
70.020			.6410	.1870	.2390	.1510		.0930		.0530	-.1100	-.1790	-.0710	-.0570	
90.020			.5450	.1200	.2420	.1810		.2760		.0480	-.1910	-.1870	-.1160	-.0300	
120.020	1.0460			.0620	.2010	.2300		.4230		-.0160	-.2230	-.2140	-.1830	-.1970	
142.020			.4170												





DATE 20 SEP 73  
 CALCULATED PRESSURE DATA - 1498  
 (RBOE14)  
 ANEC 27-707 1.9 02A + S3 + T9 ORBITER FUSELAGE

MACH (1) = 1.555 BETAT (4) = -.120

SECTION (1) ORBITER FUSELAGE	DEPENDENT VARIABLE CP									
X/LB	.0000	.1075	.2120	.3240	.4370	.5500	.6620	.7750	.8880	.9990
PHI										
180.000	1.3410	.7930	.2120	.0240	.1070	.7390				
X/LB	.872	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.0000	-.0240	.1610	.0610	-.1160	-.3120	-.1500				
40.000	-.0040	.1610	-.1260	-.1650	-.0720	-.0830	-.1190	-.1500		
70.000		-.1290	-.0600	.0270	-.1580	-.1000	-.1490	-.1540		
90.000		-.1100	-.0600	.0570	-.0030	-.1000	-.1710	-.1690		
105.000										
120.000										
135.000										
150.000										
165.000										
180.000										

MACH (1) = 1.555 BETAT (5) = 3.950

SECTION (1) ORBITER FUSELAGE	DEPENDENT VARIABLE CP									
X/LB	.0000	.1075	.2120	.3240	.4370	.5500	.6620	.7750	.8880	.9990
PHI										
.0000	1.3560	1.0970	.5730	-.0800	-.0460	.0290				
20.000			.5440	-.0760	-.0990	.0460				
40.000			.5290	-.1660	-.1050	.0310				
55.000			.4810	-.1430	-.0790	.0660				
70.000			.3820	-.0500	-.0870	.1190				
90.000			.2930	-.1180	-.0690	.1290				
105.000			.2360	-.1190	-.0250	.2940				
120.000										
142.000										
150.000										
157.000										
162.000										
165.000										
169.000										
172.000										
180.000										
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.0000	-.0200	-.0260	-.0430	-.1580	-.1330					
40.000	-.0340	.1110								

DATE 20 SEP 73

## TABULATED PRESSURE DATA - 1A98

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AVES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

(RBCB14)

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.950

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
70.000 -.1110 -.1250 -.1290 -.0790 -.0240 -.0770 -.1120  
90.000 -.0770 -.0840 -.0200 -.0960 -.0350 -.0790 -.1030  
110.000 .0270 -.0420 -.0370 -.1130 -.1040  
130.000 -.0320 -.0360 .1790 -.0170 -.1530 -.1140 -.0920  
150.000 .4870 .3020 -.1010 -.0640 -.0610  
170.000 -.0250 -.0300 .2660 .3530 .0310 -.0250 -.0410  
190.000 -.0420 .2980 .3550 .0930 .0060 -.1550  
210.000 -.1320 -.0980 .1250

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .0000 .0275 .0188 .0339 .0672 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120  
PHI  
10.000 1.3340 1.0630 .5210 -.0830 -.0190 .0130  
20.000 .4780 -.0980 -.1010 .0150  
40.000 .4270 -.0880 -.1050 .0180  
60.000 .3620 -.0870 -.1300 .0290  
80.000 .2780 -.1270 -.1480 .0940  
100.000 .7560 .2120 -.1760 .1370 .1220  
120.000 .1760 -.1570 .0770 .3070  
140.000 .1990 -.0820 .0180 .4580  
160.000 .1990 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392  
180.000 1.3340 .7830 .2040 -.0040 .1190 .5880  
200.000 .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

X/LB  
PHI  
40.000 -.0440  
60.000 .1460  
80.000 -.0150  
100.000 .0190  
120.000 .0480  
140.000 .0350  
160.000 .5710  
180.000 .0290  
200.000 .0220  
220.000 .0220  
240.000 .0220  
260.000 .0220  
280.000 .0220  
300.000 .0220  
320.000 .0220  
340.000 .0220  
360.000 .0220  
380.000 .0220  
400.000 .0220  
420.000 .0220  
440.000 .0220  
460.000 .0220  
480.000 .0220  
500.000 .0220  
520.000 .0220  
540.000 .0220  
560.000 .0220  
580.000 .0220  
600.000 .0220  
620.000 .0220  
640.000 .0220  
660.000 .0220  
680.000 .0220  
700.000 .0220  
720.000 .0220  
740.000 .0220  
760.000 .0220  
780.000 .0220  
800.000 .0220  
820.000 .0220  
840.000 .0220  
860.000 .0220  
880.000 .0220  
900.000 .0220  
920.000 .0220  
940.000 .0220  
960.000 .0220  
980.000 .0220  
1000.000 .0220

DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A9B

AKES 97-707 1A9 Q2A + S3 + T9 ORBITER FUSELAGE

(RDC014)

MACH (1) = 1.555 BETAT (6) = 6.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI .0890 .3260 .4160 .1140 .0680 -.1320

165.000 -.2110 -.0360 .0910

180.000

MACH (1) = 1.555 BETAT (7) = 8.000

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0168 .0339 .0612 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3053 .3120

PHI .0000 .5160 .0830 .0090 -.0310

.0000 .4330 .1270 .0910 .0400

.20.000 .3590 .1310 .1520 .0570

.40.000 .2840 .1370 .1810 .0090

.55.000 .2000 .1760 .2140 .0830

.70.000 .1350 .2260 .1940 .1240

.90.000 .1160 .1770 .1260 .2880

120.000 .1590 .1030 .0060 .3610

142.000

150.000

157.000

162.000

165.000

169.000

172.000

1.00.000

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI .0000 .0710 .1040 .1340 .1040

.40.000 .0580 .0680 .0740 .0420

.70.000 .0320 .0680 .0740 .0420

.90.000 .0160 .0120 .0120 .0220

110.000 .0160 .0120 .0120 .0220

120.000 .0160 .0120 .0120 .0220

135.000 .0160 .0120 .0120 .0220

150.000 .0160 .0120 .0120 .0220

165.000 .0160 .0120 .0120 .0220

180.000 .0160 .0120 .0120 .0220



(R80814)

TABULATED PRESSURE DATA - 1A95  
AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

DATE 20 SEP 73

BETAT ( 2 ) = -6.250

MACH ( 2 ) = 2.000

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0632	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PMI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

-.0470  
-.1190

-.0940

PMI															
.000	-.0580	.0740	.2330	.1930	.1190	-.0780									
40.000	.0870	-.0580	-.0830	-.0780	-.0140	-.0490	-.0710								
70.000		-.0380	-.0560	.0490	.0270	-.0120	-.0640								
90.000		-.0220	-.0540	.1310	.1570	.0260	-.0300	-.0700							
105.000															
110.000		-.0610	-.0810	.4800	.2210	.0210	-.0300	-.0510							
120.000			.2010	.2020	-.0900	-.1250	-.1130								
135.000		-.0440	-.0590	.0520	.0480	-.1510	-.0290	-.0430							
150.000		-.0280	.0710	.1670	.1070	.1330	.0110								
165.000		-.1180	-.1360	-.0060											
180.000															

BETAT ( 3 ) = -4.200

MACH ( 2 ) = 2.000

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PMI															
20.000	1.3630	1.0070	.6380	.1300	.0130	.1950									
40.000			.6570	.2040	.0660	.1880									
60.000			.6930	.2120	.2790	.1820									
80.000			.6680	.2420	.3580	.2640									
100.000			.6360	.2090	.2660	.2800									
120.000			.5710	.1350	.1660	.2920									
142.000			.5050	.1370	.1500	.2940									
160.000			.4540	.1080	.1500	.4170									
180.000															
X/LB															

.7340



DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A9B (R08014)

AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.130

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP	
X/LB			
PHI			
70.000	-.0880	-.1100	-.0630
90.000	-.0540	-.0850	-.0010
105.000		.0430	.0150
110.000			
120.000	-.0360	-.0520	.1330
135.000			
150.000	-.0430	-.0370	.1420
165.000	-.0510	.1550	.2110
180.000	-.0670	-.0260	.0370

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP	
X/LB			
PHI			
20.000	1.3400	.0620	.1360
40.000		.5640	.1650
55.000		.5350	.1640
70.000		.4630	.1610
90.000		.3900	.0520
105.000	.8280	.3320	-.0280
120.000		.3200	.0140
142.000		.3360	.0420
150.000			
157.000			
162.000			
165.000			
169.000			
172.000			
180.000	1.3400	.9020	.3200
X/LB	.5875	.6626	.7380

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP	
X/LB			
PHI			
40.000	.0680		
70.000	.0770		
90.000	-.0080		
105.000	-.0660		
120.000			
135.000	-.0530		
150.000			
165.000			
180.000			

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A99

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AVES 97-707 1A9 OZA + S3 + T9 ORBITER FUSELAGE

(R0614)

MACH ( 2 ) = 2.144 BETAT ( 5 ) = 3.950

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

165.1400 -.0950 .1350 .4080 .0160 .0260 -.0700  
180.1400 -.0800 -.0770 .0370

MACH ( 2 ) = 2.144 BETAT ( 6 ) = 5.990

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0622 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3214 .3653 .5120

PHI

.0000 1.3290 .9880 .6790 .1130 -.0740 .1740  
20.1400 .5570 .1120 -.0510 .2040  
40.1400 .4780 .1110 -.0350 .0940  
55.1400 .3970 .1040 -.0160 .0580  
70.1400 .3090 -.0050 -.0370 .0370  
90.1400 .2610 -.0780 -.0530 .1240  
120.1400 .2580 -.0350 -.0470 .1240  
140.1400 .2920 .0170 .0470 .2590  
157.0000 .5570  
162.1400 .4690  
165.1400 .5390  
169.1400 .6620  
172.0000 .7210  
180.1400 1.3290 .8830 .3070 .0910 .1240 .4270

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.0000 -.0610  
40.1400 -.0290  
70.1400 -.0880  
90.1400 -.0680  
105.1400 .0030  
110.1400 -.0620  
120.1400 .1390  
135.1400 .5220  
150.1400 -.0990  
165.1400 -.1220  
180.1400 -.1310  
-.0870 -.0760 -.0990 -.1460  
-.1170 -.1090 -.1060 -.1190  
-.0440 -.0820 -.0680 -.1070  
-.0030 -.0510 -.0670 -.1170  
-.0160 -.1370 -.1420 -.1190  
-.3360 -.1380 -.1140 -.0810  
-.1470 .1290 -.1140 -.0710  
-.1600 .2930 -.0300 -.0147  
-.1320 -.0190



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**TABULATED PRESSURE DATA - 1A9B**

(RECEIVED)

INSEC 03-217 1A9 2A + S3 + T9 CRIB TER FUSELAGE

$$\text{BETAT} (7) = 3.125$$
$$\text{MACH } (2) = 2.000$$

## SECTION ( ) ORBITER FUSELAGE

DEPENDENT VARIABLE CF

[illegible]

### REFERENCE DATA

SRPF =	2.4215	SQ.FT.	XMRP =	28.5300	INCHES
LRPF =	39.8490	INCHES	YMRP =	.0410	INCHES
URPF =	39.8490	INCHES	ZMRP =	.0300	INCHES
SCALE =	.0300	SCALE			

WACH ( 1 ) = 1.555  
 BETAT ( 1 ) = -8.325

## PARAMETRIC DATA

ALPHAT =	6.000	ORBINC =	.500
RUDDER =	-15.000	ELEVON =	.000
RUDEFLR =	.000		

SECTION 1 ORBITER FUSELAGE

[illegible]

## 三

[illegible]

DATE 24 SEP 73

TABULATED PRESSURE DATA - 1A9B

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AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE  
(RDC615)

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.280

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI	1.2760	1.2130	.5040	-.1750	-.1970	.0570			-.0180		-.0430	-.1370	-.1320	-.0980	.0140
.0000			.6680	.0790	-.0880	.0320			-.0390		-.0720				
20.0000			.8690	.1910	.2020	-.0480			-.1220		.0300	-.0680	.0500	.0230	.0420
40.0000			.8960	.2840	.3380	.1330			.0410		.1680				
55.0000			.7520	.3120	.2680	.1590			.0820		.1670	-.0940	-.1570	-.0330	-.0130
70.0000			.5930	.1890	.2890	.1790			.2210		.0790	-.1380	-.1760	-.0930	-.0620
90.0000	1.1840		.4270	.0810	.2370	.1950			.4480		-.0190	-.2140	-.2170	-.1680	-.1490
120.0000			.3240	-.0220	.1540	.5480			.5920	-.10270	-.1960	-.2350	.0020	-.1930	-.1220
142.0000							.8610		.5240		-.2690	-.1580	-.1980	-.1640	-.1080
150.0000									.3720						
162.0000															
169.0000															
172.0000	1.2760	.6970	.1550	-.0330	.0610	.5120	.8310		.5790		-.4070	-.2860	-.2510	-.2920	-.2030
180.0000		.5873	.6826	.7380	.7869	.8283	.9262	.9639	1.0015	1.0392					

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI	1.2760	1.2130	.5040	-.1750	-.1970	.0570			-.0180		-.0430	-.1370	-.1320	-.0980	.0140
.0000			.6680	.0790	-.0880	.0320			-.0390		-.0720				
40.0000			.8690	.1910	.2020	-.0480			-.1220		.0300	-.0680	.0500	.0230	.0420
70.0000			.8960	.2840	.3380	.1330			.0410		.1680				
90.0000			.7520	.3120	.2680	.1590			.0820		.1670	-.0940	-.1570	-.0330	-.0130
110.0000			.5930	.1890	.2890	.1790			.2210		.0790	-.1380	-.1760	-.0930	-.0620
120.0000	1.1840		.4270	.0810	.2370	.1950			.4480		-.0190	-.2140	-.2170	-.1680	-.1490
142.0000			.3240	-.0220	.1540	.5480			.5920	-.10270	-.1960	-.2350	.0020	-.1930	-.1220
150.0000							.8610		.5240		-.2690	-.1580	-.1980	-.1640	-.1080
162.0000									.3720						
169.0000															
172.0000	1.2760	.6970	.1550	-.0330	.0610	.5120	.8310		.5790		-.4070	-.2860	-.2510	-.2920	-.2030
180.0000		.5873	.6826	.7380	.7869	.8283	.9262	.9639	1.0015	1.0392					

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI	1.2760	1.2130	.5040	-.1750	-.1970	.0570			-.0180		-.0430	-.1370	-.1320	-.0980	.0140
.0000			.6680	.0790	-.0880	.0320			-.0390		-.0720				
20.0000			.8690	.1910	.2020	-.0480			-.1220		.0300	-.0680	.0500	.0230	.0420
40.0000			.8960	.2840	.3380	.1330			.0410		.1680				
55.0000			.7520	.3120	.2680	.1590			.0820		.1670	-.0940	-.1570	-.0330	-.0130
70.0000			.5930	.1890	.2890	.1790			.2210		.0790	-.1380	-.1760	-.0930	-.0620
90.0000	1.1840		.4270	.0810	.2370	.1950			.4480		-.0190	-.2140	-.2170	-.1680	-.1490
120.0000			.3240	-.0220	.1540	.5480			.5920	-.10270	-.1960	-.2350	.0020	-.1930	-.1220
142.0000							.8610		.5240		-.2690	-.1580	-.1980	-.1640	-.1080
150.0000									.3720						
162.0000															
169.0000															
172.0000	1.2760	.6970	.1550	-.0330	.0610	.5120	.8310		.5790		-.4070	-.2860	-.2510	-.2920	-.2030
180.0000		.5873	.6826	.7380	.7869	.8283	.9262	.9639	1.0015	1.0392					

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A9B

(RB-815)

AMES 97-707 1A9 02A + S3 + 79 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CF

X/LB	.0020	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															
X/LB	.0020	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120

PHI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															
X/LB	.0020	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -1.120

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CF

X/LB	.0020	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															
X/LB	.0020	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98

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ANES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE (R80815)

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0168	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.5020	.7070	.1490	-.0170	.0670	.6750		.5920		-.3610	-.3110	-.1460	-.1780	-.1750	
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0280							-.0550		-.0310					
40.000	.0490	.2230		.0720	.0900	-.1090	-.3220			-.0580					
70.000		-.1310	-.1480	-.2010	-.1000	-.1180	-.1360	-.1560							
90.000		-.1130	-.0970	-.0110	-.1680	-.1700	-.1840	-.1840							
105.000				.0840	.0340	-.0940	-.1850	-.2160							
110.000								-.0800							
120.000		-.0710	-.0520	.3690	.0550	-.1580	-.1660	-.1430	-.1130						
135.000				.3320	.2230	-.1630	-.0800	-.0530							
150.000		-.0360	.0470	.1810	.1790	-.0220	-.0210	-.0520							
165.000		-.1000	.1860	.1860	.2450	.0760	.0180	-.1660							
180.000		-.0230	-.0080	.1670											

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.970

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0168	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3100	1.2560	.5620	-.1440	-.1670	.0680		.0540		-.0670	-.1200	-.1610	-.0370	.0670	
20.000		.5200	-.1450	-.1840	.0700		.0190	.0190		-.1140					
40.000		.5270	-.1460	-.1640	.0730		-.0200	-.0200		-.1330	-.1250	-.1040	-.0140	.0230	
55.000		.4870	-.1130	-.1130	.0600		-.0110	-.0110		-.0130					
70.000		.3990	-.0980	-.1380	.1040		.1080	.1080		.0010	-.2390	-.3060	-.1780	-.0840	
90.000	.6140	.2670	-.1460	-.0890	.1010		.2420	.2420		-.0290	-.2750	-.3010	-.2380	-.0840	
120.000		.1930	-.1470	-.0470	.2630		.1830	.1830		-.0910	-.2980	-.2980	-.2300	-.0930	
142.000										-.2800					
150.000		.1910	-.1050	.0050	.5070		.4620	.4620		-.2860	-.2960	.0000	-.1940	-.1310	
157.000							.7030								
162.000							.3530								
165.000							.3920								
169.000															
172.000															
180.000	1.3100	.7350	.1590	-.0390	.0640	.5930	.8750			-.4050	-.2970	-.1810	-.1850	-.1690	
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0110							-.0450		-.0420					
40.000	.0190	.1260		.0550	.0910	-.1650	-.1720			-.0760					

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE

(RBO815)

MACH ( 1 ) = 1.555

BETAT ( 5 ) = 3.970

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	PHI	70.000	90.000	105.000	115.000	120.000	135.000	150.000	165.000	180.000
.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392	

MACH ( 1 ) = 1.555

BETAT ( 6 ) = 6.030

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	PHI	20.000	40.000	55.000	70.000	90.000	120.000	142.000	150.000	157.000	162.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120	

MACH ( 1 ) = 1.555

BETAT ( 6 ) = 6.030

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	PHI	20.000	40.000	55.000	70.000	90.000	120.000	142.000	150.000	157.000	162.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120	

MACH ( 1 ) = 1.555

BETAT ( 6 ) = 6.030

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	PHI	20.000	40.000	55.000	70.000	90.000	120.000	142.000	150.000	157.000	162.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120	

DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A9B

AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

(RBOB13)

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.030

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7969 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI .0000 .0320 .3160 .4100 .0910 .0430 -.1460

165.0000 -.1990 -.0900 .1140

180.0000

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.080

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0612 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI .0000 1.2990 1.1020 .5460 -.0940 -.0890 -.0180

20.0000 .4490 -.1500 -.1660 -.0210

40.0000 .3760 -.1540 -.1840 -.0370

60.0000 .2940 -.1520 -.2020 -.0320

80.0000 .1980 -.1890 -.2190 .0770

100.0000 .1230 -.2280 -.2030 .1130

120.0000 .0890 -.1970 -.1410 .2270

142.0000 .1100 -.1370 -.0430 .3320

150.0000

157.0000

162.0000

165.0000

169.0000

172.0000

180.0000 1.2990 .7160 .1400 -.0430 .0710 .4780

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI .0000 .0580

40.0000 .1060

70.0000 .0690 .1190 .1590 .1180 .1300 .1600 .1980

90.0000 .0380 .0810 .1080 .1070 .1410 .1960 .2540

110.0000 .0520 .0560 .1410 .2150 .2250

120.0000 .0020 .0280 .2760 .0290 .2200 .2150 .1980

135.0000 .5290 .3430 .1840 .1700 .1410

150.0000 .0290 .0280 .2310 .2320 .1750 .1610 .1560

165.0000 .0160 .2640 .3700 .0100 .0270 .2110

180.0000 .1110 .0640 .1310

PHI .0000 .0580

40.0000 .1060

70.0000 .0690 .1190 .1590 .1180 .1300 .1600 .1980

90.0000 .0380 .0810 .1080 .1070 .1410 .1960 .2540

110.0000 .0520 .0560 .1410 .2150 .2250

120.0000 .0020 .0280 .2760 .0290 .2200 .2150 .1980

135.0000 .5290 .3430 .1840 .1700 .1410

150.0000 .0290 .0280 .2310 .2320 .1750 .1610 .1560

165.0000 .0160 .2640 .3700 .0100 .0270 .2110

180.0000 .1110 .0640 .1310

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A9B

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AMES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE

(RD3815)

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.260

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0168	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	1.2810	1.0070	.6380	.1650	.0019	.1700			.0670		.0330	-.0250	-.0780	-.0700	-.0330
20.000			.6780	.2940	.1080	.1310			.0560		-.0150				
40.000			.7320	.3330	.3570	.1260			.0330		-.0240	-.0670	-.0230	.0770	.0930
55.000			.7240	.3440	.4390	.2500			.1600		.0810				
70.000			.6920	.2730	.3570	.2680			.1940		.1570	-.0220	-.0810	-.0610	.0340
90.000	1.0680		.6150	.1830	.2300	.2800			.2210		.1900	-.0460	-.0900	-.0820	-.0480
120.000			.5120	.1480	.1820	.2710			.5060		.0910	-.0750	-.1210	-.0180	-.0800
142.000										.1100					
150.000			.4200	.0930	.1330	.3420			.6760		-.0870	-.0610	.0000	-.0150	-.0070
157.000								.8200							
162.000									.6380			-.0520	-.0780	-.0160	-.0990
165.000									.4970						
169.000															
172.000						.7720									
180.000	1.2810	.8100	.2780	.0740	.0950	.4520			.6810		-.2190	-.1800	-.2070	-.2160	-.0140
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

PHI

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -4.210

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0168	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	1.3180	1.0160	.6560	.1380	.0060	.2020			.0070		.0710	-.0110	-.0770	-.0080	-.0490
20.000			.6640	.2240	.0610	.1790			.0740		.0490				
40.000			.6930	.2240	.2700	.1550			.0620		-.0180	-.0440	-.0420	.0790	.0680
55.000			.6600	.2670	.3430	.2270			.1480		.0580				
70.000			.6190	.1780	.2530	.2450			.1740		.1360	-.0590	-.1270	-.0840	.0030
90.000	1.0410		.5480	.1020	.1510	.2570			.2030		.1720	-.0800	-.1120	-.0050	-.0260
120.000			.4860	.1190	.1230	.2520			.5130		.0670	-.0000	-.0350	-.0200	-.0900



DATE 25 SEP 73 TABULATED PRESSURE DATA - 1A9B

AMES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE (RBO0815)

MACH ( 2 ) = 2.0000 BETAT ( 2 ) = -4.210

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000	1.3100	.8390	.2830	.0740	.0930	.3690									
X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

PHI  
142.000  
150.000  
157.000  
162.000  
165.000  
169.000  
172.000  
180.000

PHI  
142.000  
150.000  
157.000  
162.000  
165.000  
169.000  
172.000  
180.000

MACH ( 2 ) = 2.0000 BETAT ( 3 ) = -.130

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000	1.3100	.8390	.2830	.0740	.0930	.3690									
X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

PHI  
142.000  
150.000  
157.000  
162.000  
165.000  
169.000  
172.000  
180.000

PHI  
142.000  
150.000  
157.000  
162.000  
165.000  
169.000  
172.000  
180.000

[illegible]

DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A98 (R80815)

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.970  
SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP  
X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI									
70.000	-.0990	-.1200	-.1090	-.0840	-.1230	-.1440	-.1250		
90.000	-.0710	-.0920	-.0360	-.0830	-.1070	-.1410	-.1190		
105.000			-.0200	-.0320	-.0960	-.1440	-.1270		
115.000							-.0220		
120.000	-.0580	-.0620	-.1220	-.0780	-.1360	-.1370	-.0990		
135.000			.4210	.2850	-.1160	-.1300	-.0690		
150.000	-.0740	-.0360	.1720	.3870	-.1100	-.0530	-.0420		
165.000	-.0940		.1370	.3860	.0290	-.0240	-.0720		
180.000	-.0860		.0120						

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 6.020

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0675	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
0.000	1.2990	1.0100	.6370	.1470	-.0110	.1840			.0830	.0510	-.0010	-.0520	-.0820	-.0410	
20.000			.5860	.1140	-.0520	.2080			.0960	.0330	-.0780	-.0960	-.1530	.0290	
40.000			.5080	.1160	-.0320	.1790			.0830	-.0440	-.0780	-.0960	-.1530	.0290	
55.000			.4180	.1110	-.0110	.0960			.0720	.0150	-.0840	-.1440	-.1650	-.1160	
70.000			.3320	-.0120	-.0440	.0560			.1160	.0750	-.0970	-.1510	-.1680	-.1290	
90.000	.7460		.2610	-.0720	-.0440	.0340			.2170	.0770	-.0970	-.1510	-.1680	-.1290	
120.000			.2360	-.0430	-.0430	.0540			.3310	.0340	-.1280	-.1570	-.1410	-.1190	
142.000										-.1550					
150.000			.2570	-.0240	.0240	.2130			.3750	-.1950	-.1830	.0220	-.0790	-.1090	
157.000								.5760							
162.000									.4380	-.2400	-.1950	-.1100	-.0810	-.1190	
165.000									.4900						
169.000															
172.000															
180.000	1.2990	.8210	.2680	.0640	.0680	.3220			.6590	-.2130	-.1690	-.1730	-.2150	-.1390	
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
0.000	-.0550														
40.000	.0110	.0930		-.0790	-.0780	-.0960	-.1420		-.0840						
70.000		-.1210		-.1180	-.0890	-.0980	-.1140								
90.000		-.0980		-.0510	-.0860	-.0740	-.1250								
105.000		-.0710		-.0980	-.0510	-.0740	-.1150								
115.000				-.0640	-.0490	-.0740	-.1150		-.0430						
120.000															
135.000		-.0620	-.0620	.1250	-.0120	-.1330	-.1410								
150.000			.4840	.3680	-.1340	-.1070	-.1680								
155.000		-.1010	-.0640	.1090	.2010	-.1250	-.0430								





AVCS 97-70.7 1A9 02A + S3 + T9 ORBITER FUSELAGE

(730616)

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.290

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	PHI	.0000	.0075	.0168	.0339	.0672	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI																
.0000	1.2960	1.2370	.5310	-.1500	-.1700	.0400				.0250		-.0470	-.1400	-.1100	-.0720	.0680
.20.000			.7350	.0370	-.0900	.0200				.0440		-.0400	-.0750	.0870	.0720	.0370
.40.000			.9120	.2340	-.2060	-.0650				-.0200		.0420				
.60.000			.8710	.2850	.3240	.0180				.0280		.0190				
.80.000			.7630	.3480	.2460	.1350				.0620		.0860	-.0160	-.1730	-.0300	-.0200
.90.000			.6140	.1930	.2590	.1520				.0290		.0300	-.1420	-.2040	-.0890	-.0720
1.00.000	1.0800		.3920	.0610	.2030	.1530				.4520		-.0440	-.2170	-.2420	-.1840	-.1730
1.20.000										-.0380						
1.40.000			.2770	-.0450	.1270	.5000				.5560		-.2260	-.2480	.0000	-.2050	-.1300
1.60.000								.8240								
1.80.000										.4930		-.2710	-.1720	-.2030	-.1850	-.1120
2.00.000										.3380						
2.20.000							.7610									
2.40.000						.0410	.4680			.5350		-.4110	-.3020	-.2690	-.3310	-.2260
2.60.000	1.2960	.6420	.1100	-.0580												
2.80.000	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						

PHI																
.0000	.0330									-.0240		-.0080				
.20.000	.1910	.4560	.3200	.2450	-.0550	-.2680				.0400						
.40.000		-.1200	-.2140	-.1210	-.1090	-.1360	-.1220									
.60.000		-.1180	-.1070	-.0340	-.0210	-.1350	-.0650									
.80.000			.0580	.1600	-.0210	-.1490	-.1850									
1.00.000										-.0460						
1.20.000		-.1770	-.1530	.5980	.1870	-.0790	-.1300	-.1540		-.0700						
1.40.000			.2130	.1310	-.2280	-.1860	-.0440									
1.60.000		-.1110	.0090	.0490	-.0830	.0010	.0010									
1.80.000		-.0850	.1470	.2170	.0540	.0420	-.1210									
2.00.000		-.1170	-.0050	.1560												

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

## SECTION ( 2 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	PHI	.0000	.0075	.0168	.0339	.0672	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI																
.0000	1.4290	1.2120	.5560	-.1580	-.1970	.0590				.0590		-.0550	-.1320	-.1460	-.0520	.0800
.20.000			.6820	-.0420	-.1130	.0130				.0710		-.0430				
.40.000			.8260	.1440	.1420	-.0680				-.0430		-.0240	-.1230	.0600	.0240	.1580
.60.000			.8210	.1940	.2460	.0850				.0110		.0670				
.80.000			.7220	.2410	.1680	.1130				.0430		.0300	-.0420	-.2110	-.0520	-.0500
.90.000			.5240	.0930	.1400	.1330				.0260		.0620	-.1730	-.2350	-.0160	-.0100
1.00.000	1.0650		.3380	.0810	.1410	.1010				.4200		-.0160	-.2430	-.2570	-.0230	-.1530

TABULATED PRESSURE DATA - 1A98

(R00016)

DATE 20 SEP 73 AMES 97-707 1A9 Q2A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555		BETAT ( 3 ) = -4.240		DEPENDENT VARIABLE CF									
SECTION ( 1 ) ORBITER FUSELAGE													
X/LB	.0000	.0075	.0150	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200
PHI													
142.000													
150.000													
157.000													
162.000													
165.000													
169.000													
172.000													
180.000													
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392			
SECTION ( 1 ) ORBITER FUSELAGE													
X/LB	.0000	.0075	.0150	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200
PHI													
142.000													
150.000													
157.000													
162.000													
165.000													
169.000													
172.000													
180.000													
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392			
SECTION ( 1 ) ORBITER FUSELAGE													
X/LB	.0000	.0075	.0150	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200
PHI													
142.000													
150.000													
157.000													
162.000													
165.000													
169.000													
172.000													
180.000													
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392			

BETAT ( 4 ) = -.110

MACH ( 1 ) = 1.555

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CF

X/LB	.0000	.0075	.0150	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392					





DATE 21 SEP 73

TABLED PRESSURE DATA - 1A98

AMES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE

DETAY ( 5 ) = 4.000

MACH	( 1 ) =	1.555
BETAT	( 5 ) =	4.0000
DEPENDENT VARIABLE CP		
SECTION ( 1 ) ORBITER FUSELAGE		
		2.0392

[illegible]

BETAT ( 6 ) = 6.063

[illegible]

172.332	.1093	-0.0673
200.1420	.6773	
	1.2710	
		1.0392

22

[illegible]

## AVES 97-707 1A9 OCA + S3 + T9 ORBITER FUSELAGE

(R00B16)

MACH ( 1 ) = 1.555      DATAT ( 6 ) = 6.060

## SECTION ( 1 ) ORBITER FUSELAGE      DEPENDENT VARIABLE CP

X/LB      .5873      .6626      .7380      .7869      .8283      .8848      .9262      .9639      1.0015      1.0392

## PHI

165.000      .0370      .3020      .3670      .0790      .0130      -.1810  
 180.000      -.1100      -.0450      .1580

MACH ( 1 ) = 1.555      BETAT ( 7 ) = 8.120

## SECTION ( 1 ) ORBITER FUSELAGE      DEPENDENT VARIABLE CP

X/LB      .5873      .6626      .7380      .7869      .8283      .8848      .9262      .9639      1.0015      1.0392

## PHI

1.2800      1.1680      .5310      -.1440      -.1540      -.0030      -.1020      -.0510      -.1390      -.0780      -.0750      -.0860  
 20.000      .4340      -.1820      -.2120      -.0020      -.0020      -.0670      -.1210      -.1960      -.1280      .0940      .0470  
 40.000      .3760      -.1830      -.2170      -.0310      -.0310      -.1180      -.1960      -.1960      -.1280      .0940      .0470  
 55.000      .3030      -.1760      -.2250      -.0420      -.0420      -.0620      -.0760      -.0760      -.3440      -.0850      -.0340  
 70.000      .2020      -.2130      -.2420      .0670      .0670      .0770      -.1460      -.2800      -.3440      -.1360      -.0220  
 90.000      .1120      -.2520      -.2110      .0860      .0860      .1780      -.0790      -.3060      -.3440      -.1360      -.0220  
 120.000      .0580      -.2190      -.1490      .1840      .1840      .0610      -.1550      -.3340      -.3260      -.2540      -.0150  
 142.000      .0680      -.1670      -.0570      .3020      .3020      .2850      -.3770      -.3330      .0020      -.2100      -.1470  
 150.000      .0680      -.1670      -.0570      .3020      .3020      .2850      -.3770      -.3330      .0020      -.2100      -.1470  
 157.000      .0680      -.1670      -.0570      .3020      .3020      .2850      -.3770      -.3330      .0020      -.2100      -.1470  
 162.000      .0680      -.1670      -.0570      .3020      .3020      .2850      -.3770      -.3330      .0020      -.2100      -.1470  
 165.000      .0680      -.1670      -.0570      .3020      .3020      .2850      -.3770      -.3330      .0020      -.2100      -.1470  
 169.000      .0680      -.1670      -.0570      .3020      .3020      .2850      -.3770      -.3330      .0020      -.2100      -.1470  
 172.000      .0680      -.1670      -.0570      .3020      .3020      .2850      -.3770      -.3330      .0020      -.2100      -.1470  
 180.000      .0680      -.1670      -.0570      .3020      .3020      .2850      -.3770      -.3330      .0020      -.2100      -.1470

X/LB      .5873      .6626      .7380      .7869      .8283      .8848      .9262      .9639      1.0015      1.0392

## PHI

1.130      .0580      .0540      -.1030      -.1170      -.1140      -.0890      -.0290  
 40.000      .0580      .0540      -.1030      -.1170      -.1140      -.0890      -.0290  
 70.000      -.0840      -.1420      -.1420      -.1580      -.1860      -.1930      -.1320  
 90.000      -.0410      -.0890      -.0350      -.1150      -.1590      -.2160      -.1980  
 105.000      .0340      -.0590      -.0590      -.1590      -.2280      -.2190  
 110.000      -.0110      -.0350      -.0390      -.2130      -.2090      -.1840      -.0940  
 120.000      .4720      .2890      -.1840      -.1680      -.1250      -.1530  
 135.000      -.0170      -.0250      .1840      -.1670      -.0880      -.1430  
 150.000      -.0120      .2620      .3460      .0010      -.0520      -.2250  
 165.000      -.0180      -.0300      .1480

AMES 97-737 IA9 02A + S3 + T9 CRBI TER FUSELAGE

(R000016)

WACH (2) = 2.0000

BETAT ( 1 ) = -8.340

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.5000	.5675	.5188	.5339	.5602	.5355	.5506	.5581	.5732	.5958	.2259	.2711	.3200	.3953	.5120
PHI															
.0000	.0000	.0000	.0000	.0340	.0000	-.0320		-.0610			.0000	-.0950	.0000	-.0910	.0000
20.000	.0000	.0000	.0000	.2190	.0000	.0000		-.1100			.0000				
40.000	.0000	.0000	.0000	.0000	.0000	.0000		-.1020			.0000	-.1020	.0000	.0310	.0000
55.000	.0000	.0000	.0000	.0000	.4420	.0000		.0870			.0000				
70.000	.0000	.7510	.0000	.0000	.3430	.0000		.1190			.0000	.0000	.0000	-.0750	.0000
90.000	.0000	.6290	.0000	.0000	.3130	.0000		.1370			.1510	.0000	.0000	.0000	.0000
120.000		.4410	.0000	.0000	.1280	.0000		.4480		.0000	-.0010	.0000	-.1840	.0000	.0000
142.000															
150.000		.3220	.0000	.0000	.0370	.0000		.0000			-.1760	.0000	.0000	.0000	-.1520
157.000															
162.000															
165.000															
169.000															
172.000															
180.000	.0000	.0000	.1510	.0000	-.0460	.0000									
X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

**MACH ( 2 ) = 2.000**

BETAT ( 2 ) = -6.270

SECTION ( 1 ) ORBITER FUSELAGE

**DEPENDENT VARIABLE CP**

N/L5	.0070	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3693	.5120
PMI															
000	1.2880	1.0780	.7190	.1110	-.0370	.1660		.0660	.0150	-.0280	-.0650	-.0440	-.0930		
20.000			.7630	.2520	.0830	.0640		.0430	-.0270						
40.000			.8090	.3410	.3590	.0830		.0000	-.0510	-.0570	-.0610	.0510	.1070		
55.000			.7860	.3840	.4320	.2210		.1420	.0610						
70.000			.7320	.3290	.3440	.2410		.1680	.1250	-.0300	-.0980	-.0510	.0320		
90.000		1.4010	.6150	.1930	.3140	.2500		.1920	.1820	-.0600	-.1150	-.0740	-.0210		
120.000			.4760	.1290	.1750	.2280		.4920	.0560	-.0920	-.1310	-.1450	-.0900		





(RDS16)

AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.120

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

70.000 -1.160 -1.320 -1.380 -1.070 -1.120 -1.140 -1.190 -1.300  
 90.000 -1.080 -1.180 -1.080 -1.220 -1.080 -1.220 -1.250 -1.250  
 110.000 .0560 .0330 .0330 .0680 -1.130 -1.130 -1.130  
 130.000 -1.0670 -1.070 .2170 .0920 -1.090 -1.120 -1.050 -1.050  
 150.000 .1780 .1780 .1780 .1780 -1.130 -1.090 -1.030  
 170.000 -1.0610 -1.0130 .0790 .0870 -1.020 -1.020 -1.010  
 190.000 -1.0590 .0990 .1450 .1460 .1460 -1.060  
 210.000 -1.0570 -1.0360 .0340

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0180 .0339 .0602 .1355 .1516 .1591 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

.000 1.2950 1.0960 .7190 .1240 -1.0490 .2110 .1400 -1.0270 -1.0630 -1.1120 -1.0490  
 20.000 .6860 .1520 -1.0560 .2670 .1740  
 40.000 .6110 .1570 .0420 .2010 .1100 -1.0510 -1.0600 -1.0980 -1.1500 -1.2490  
 55.000 .5090 .1730 .0230 .0910 .0740 -1.0050  
 70.000 .4070 .0300 -1.0180 .0730 .0990  
 90.000 .7960 .3210 -1.0300 -1.0120 .0630 .1670  
 120.000 .2620 -1.1250 -1.0230 .0760 .1930  
 142.000 .2540 -1.0110 .0110 .1450 -1.1580 -1.1730 .0000 -1.1010 -1.1170  
 150.000 .5000  
 157.000 .4210  
 162.000 .4620  
 169.000 .6100  
 172.000 .6230  
 180.000 1.2950 .7760 .2370 .0400 .0540 .2950 .6100 .6230  
 190.000 .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.000 .1020  
 40.000 .0780 .1480  
 70.000 -1.1120 -1.1340 -1.1210 -1.0890 -1.1410 -1.1590 -1.1310  
 90.000 -1.0810 -1.1020 -1.0390 -1.0720 -1.1150 -1.1550 -1.1280  
 110.000 -1.0150 -1.0340 -1.0340 -1.060 -1.1550 -1.1340  
 130.000 -1.0680 .0790 .0190 -1.1360 -1.1290 -1.1030 -1.0700  
 150.000 .3640 .2240 -1.1370 -1.1360 -1.0700  
 170.000 -1.0770 -1.0430 .1410 .4000 -1.1200 -1.0780 -1.0480

DATE 21 SEP 73 TABULATED PRESSURE DATA - 149B

AMES 97-757 1A9 C2A + S3 + T9 ORBITER FUSELAGE (RBC816)

MACH (2) = 2.000 BETAT (5) = 3.990

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6826 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
163.000 -.1010 .1100 .3340 -.0250 -.0140 -.0820  
180.000 -.0980 -.1120 -.0150

MACH (2) = 2.000 BETAT (6) = 6.050

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI  
.000 1.2810 1.1850 .6770 .1070 -.0550 .1640 .0790 .0320 .0190 .0320 .0190 .0640 -.0560 -.0440  
20.000 .6240 .0990 -.0830 .2320 .0080 .0080  
40.000 .5300 .0990 -.0770 .1980 .0780 .0780  
55.000 .4260 .1000 -.0420 .0590 .0430 .0430  
70.000 .3300 .0320 -.0690 .0550 .0820 .0820  
90.000 .7340 .2460 -.0790 -.0560 .0140 .1720 .1720  
120.000 .2030 -.0630 -.0580 .0180 .1170 .1170  
142.000 .2150 -.0310 -.0160 .1520 .3340 .3340  
150.000 .4930 .4930  
157.000 .3770 .3770  
162.000 .4420 .4420  
165.000 .5960 .5960  
169.000 .6220 .6220  
172.000 .3780 .3780  
180.000 1.2810 .7530 .2180 .0300 .0540 .3780 .9639 1.0015 1.0392

X/LB .5873 .6826 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
-0.0990  
40.000 .1400 .1400  
70.000 -.1130 .1130  
90.000 -.0800 .0800  
105.000 .0150 .0150  
110.000 .1350 .1350  
120.000 .4160 .4160  
135.000 -.0940 .0940  
150.000 .1210 .1210  
165.000 .1630 .1630





## PARAMETRIC DATA

ALPHAT =	-8.000	ORBINC =	.500
RUDDER =	-10.000	ELEVON =	.000
RUDELR =	.000		

## REFERENCE DATA

SCF =	2.4210 SQ.FT.	XRP =	28.5300 INCHES
LEF =	39.8493 INCHES	YRP =	.0000 INCHES
ZRF =	39.8493 INCHES	ZRP =	.0000 INCHES
SCALE =	.0000 SCALE		

BETAT ( 1 ) = -8.410

## DEPENDENT VARIABLE CP

[illegible]







AVES 97-707 1A9 02A + S3 + 19 ORBITER FUSELAGE (750817)

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.930

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5673 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

70.0000 -.0250 -.0150 .0210 .0850 .0270 -.0440 -.0420  
 90.0000 -.0420 -.0150 .0870 .0290 -.0170 -.0700 -.0400  
 110.0000 .0830 -.0160 .0170 -.0900 -.0550  
 120.0000 .0210 -.0160 .1890 -.0400 .1080 -.0880  
 130.0000 .7820 .3480 -.0320 -.1240 -.1210  
 150.0000 .0470 .3360 .5610 .1520 .0550 .0020  
 165.0000 -.0020 .3770 .5810 .2150 .1110 -.0130  
 180.0000 .0170 .0330 .3020

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1516 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

.0000 1.4720 .9870 .4410 -.0810 .1050 .0180  
 20.0000 .3850 -.0830 -.0400 .0410  
 40.0000 .3470 -.0830 -.0470 .0360  
 55.0000 .3140 -.1250 -.0610 .1380  
 70.0000 .2910 -.1570 -.0100 .2010  
 90.0000 .8330 .2750 -.0400 .0650 .3010  
 120.0000 .3400 -.0220 .0640 .3220  
 142.0000 .4520 .1420 .2610 .6570  
 157.0000  
 162.0000 .4690  
 165.0000 .5910  
 169.0000  
 172.0000 1.0730  
 180.0000 1.4720 1.0980 .4970 .3050 .4130 1.0050  
 X/LB .5673 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.0000 -.1660  
 40.0000 -.1300  
 70.0000 .0330 .0120 .1630 .1660 .0110  
 90.0000 .0410 .0140 .1510 .1160 .0290 .0010  
 105.0000 .3390 .0280 .0290 .0370 .0060  
 110.0000  
 120.0000 .0070 -.0260 .2460 .0010 .1910 .0740 .0550  
 130.0000 .7840 .4130 .1240 .1200 .1270  
 150.0000 -.0060 .0410 .1830 .4250 .1000 .0860 .0140

DATE 24 SEP 73 TABULATED PRESSURE DATA - 1A08

(R00017)

ANOS 97-707 1A082A + S3 + TO ORBITER FUSELAGE

MACH ( 1 ) = 1.555 SETAT ( 6 ) = 5.000

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.9283	.8848	.9262	.9630	1.0005	1.0392
PMI										
165.000				.3210	.5130	.2020	.1240			
180.000				-.0220	.2250					

MACH ( 1 ) = 1.555 SETAT ( 7 ) = 8.050

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PMI															
20.000	1.4490	.9690	.4420	-.0720	.1440	-.0160									
25.000			.3530	-.1100	.0700	-.0590									
40.000			.2880	-.1100	-.0760	.0150									
55.000			.2390	-.1580	-.1370	.0260									
70.000			.1920	-.2210	-.1770	.0930									
90.000		.7590	.2000	-.1900	-.1500	.2850									
120.000			.2810	-.0680	.0160	.1950									
142.000			.4110	.1210	.2310	.5850									
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000	1.4490	1.0790	.4810	.2950	.4150	.9590									







[illegible]

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBCB17)

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170

SECTION ( 1 ) ORBITER FUSELAGE  
 X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
 70.000 .0310 .0200 .0310 .0640 .0720 .0400 .0140  
 75.000 .0570 .0270 .1315 .0640 .0780 .0210 -.0010  
 80.000 .1540 .1180 .0790 .0210 -.0180  
 105.000 .0740 .0610 .2980 .1170 -.0130 .0080 .0380  
 120.000 .0660 .4740 .0190 .0780 .1070  
 135.000 .0660 .0710 .3340 .5040 .1530 .1820 .1590  
 150.000 .0570 .3270 .5780 .3550 .2750 .0720  
 165.000 .0680 .0790  
 180.000

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930

SECTION ( 1 ) ORBITER FUSELAGE  
 X/LB .9300 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3210 .3953 .5120

PHI  
 20.000 1.5770 .9790 .5180 .0660 .0070 .1860  
 40.000 .4670 .0650 .0120 .1720  
 60.000 .4460 .0330 .0330 .1500  
 80.000 .4150 .0350 .0460 .1820  
 100.000 .3920 .0160 .0110 .1480  
 120.000 .9610 .4100 .0090 .0060 .1250  
 140.000 .5020 .1270 .1300 .1170  
 160.000 .5920 .2430 .2950 .4980  
 180.000 .6080 .3540 .3950 .7980  
 1.5770 1.2490 .6080 .3540 .3950 .7980  
 .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
 40.000 .0030 .0320 .1180 .1610 .1770 .2190  
 60.000 .0370 .0030 .0260 .0560 .0440 .0070 .0150  
 80.000 .0330 .0100 .0820 .0430 .0410 .0130 .0370  
 100.000 .1060 .0370 .0410 .0320 .0410  
 120.000 .0460 .0380 .2480 .0300 .0920 .0420 .0100  
 140.000 .0220 .0450 .3010 .6080 .1860 .1270 .0820  
 160.000 .0220 .0450 .3010 .6080 .1860 .1270 .0820  
 180.000 .0220 .0450 .3010 .6080 .1860 .1270 .0820  
 1.5770 1.2490 .6080 .3540 .3950 .7980  
 .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A9B

(RBC817)

APR 97-757 1A9 C2A + S3 + T9 ORBITER FUSELAGE

MACH (2) = 2.000 BETAT (5) = 5.980

DEPENDENT VARIABLE CP

SECTION (1) ORBITER FUSELAGE

1.0015 1.0392

X/LB

.5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639

PHI

-.0080 .2790 .6440 .2680 .1780 .0200

165.000

.0310 .0400 .1750

180.000

MACH (2) = 2.000 BETAT (6) = 5.980

DEPENDENT VARIABLE CP

SECTION (1) ORBITER FUSELAGE

1.0015 1.0392

X/LB

.5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639

PHI

-.0080 .2790 .6440 .2680 .1780 .0200

165.000

.0310 .0400 .1750

180.000

MACH (2) = 2.000 BETAT (6) = 5.980

DEPENDENT VARIABLE CP

SECTION (1) ORBITER FUSELAGE

1.0015 1.0392

X/LB

.5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639

PHI

-.0080 .2790 .6440 .2680 .1780 .0200

165.000

.0310 .0400 .1750

180.000

MACH (2) = 2.000 BETAT (6) = 5.980

DEPENDENT VARIABLE CP

SECTION (1) ORBITER FUSELAGE

1.0015 1.0392

X/LB

.5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639

PHI

-.0080 .2790 .6440 .2680 .1780 .0200

165.000

.0310 .0400 .1750

180.000

MACH (2) = 2.000 BETAT (6) = 5.980

DEPENDENT VARIABLE CP

SECTION (1) ORBITER FUSELAGE

1.0015 1.0392

X/LB

.5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639

PHI

-.0080 .2790 .6440 .2680 .1780 .0200

165.000

.0310 .0400 .1750

180.000

MACH (2) = 2.000 BETAT (6) = 5.980

DEPENDENT VARIABLE CP

SECTION (1) ORBITER FUSELAGE

1.0015 1.0392

X/LB

.5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639

PHI

-.0080 .2790 .6440 .2680 .1780 .0200

165.000

.0310 .0400 .1750

180.000



[illegible]

AMES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE (RBO818)

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.340

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PMI															
140	1.4190	.9885	.4520	-.1230	.0480	.0060			-.0170	-.0780	-.0710	-.0030	.0350	-.0780	
20	.0000	.5410	.0030	.0830	.0190				-.0250	-.0550	-.0630	.0650	-.0110	.0280	
40	.0000	.6920	.0800	.2560	.0460				-.0770	.1340	.1370	.0650	-.0110	.0280	
55	.0000	.7440	.1840	.3680	.2320				.1800	.3110	.1340	-.1190	-.1740	.0440	.1630
70	.0000	.7330	.2270	.3670	.2820				.3110	.1110	-.1380	-.1450	.0140	.0470	
90	.0000	1.1970	.6820	.2190	.3750	.3210			.4150	.1110	-.1380	-.1450	.0140	.0470	
120	.0000	.6130	.2170	.3810	.5340				.5670	.0920	-.1540	-.1150	-.0920	.0190	
142	.0000								-.0180	-.0590	-.1230	.0420	-.0450	.0010	
150	.0000	.5540	.1660	.3640	.8580			1.0190	.7600	-.0590	-.1230	.0420	-.0450	.0010	
157	.0000								.6800						
162	.0000								.5550	-.2300	-.0570	-.0860	-.0780	.0020	
165	.0000														
169	.0000								.7780	-.3250	-.1580	-.1400	-.1620	-.1300	
172	.0000	1.4190	.9720	.3920	.1770	.2890	.8360	1.1770							
180	.0000	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392				

PMI

MACH ( 1 ) = 1.555

BETAT ( 3 ) = -4.250

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PMI															
140	1.4320	1.0130	.4640	-.1220	.0160	.0270			.0360	-.0450	-.0490	.0320	.0340	-.0870	
20	.0000	.5280	-.0220	.0250	.0340				.0200	-.0310	-.0310	.0320	.0340	-.0870	
40	.0000	.6400	.0160	.1870	.0590				-.0510	-.0470	-.1210	.0460	.0020	.0010	
55	.0000	.6710	.0920	.2680	.2110				.1650	.1130	.1130	.0460	.0020	.0010	
70	.0000	.6570	.1370	.2690	.2610				.2930	.0950	-.1300	-.1980	-.0590	.0460	
90	.0000	1.1420	.6040	.1430	.2780	.2980			.3880	.0790	-.1640	-.1710	-.0300	.0260	
120	.0000	.5590	.1440	.3090	.5230				.5110	.0820	-.1730	-.1420	-.1170	.0090	

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B

AMES 97-707 1A9 ORA + S3 + T9 ORBITER FUSELAGE

(R070818)

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.250

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3250	.3953	.5120
PMI															
142.000									.7350						
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

PMI

-.1290

-.0600

.1070

-.0370

-.0480

-.0170

.1560

.1100

.4460

.5380

.2270

-.0780

-.0030

-.0570

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.160

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CF

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3250	.3953	.5120
PMI															
.000									.1290						
20.000									.1240						
40.000									.1100						
55.000									.1440						
70.000									.2630						
90.000									.3380						
120.000									.4360						
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															

1.1290

(RB-018)

--- TABULATED PRESSURE DATA - 1A98

DATE 20 SEP 73

AMES 97-707 1A9 CEA + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555

BETAT ( 4 ) = -.160

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB .00000 .00075 .00188 .00339 .00602 .01355 .01506 .01581 .01732 .01958 .02259 .02711 .03200 .03953 .05120

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI 180.0000 1.4520 .9990 .4080 .1920 .2890 .9970

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392



AMES 97-7:17 1A9 C2A + S3 + T9 ORBITER FUSELAGE

(ਸਤਿਨਾਮ)

**MACH (1) = 1.555**

BETAT ( 5 ) = 3.931

## SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.5073	.6626	.7380	.7669	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
70.000	-.5700	-.0650	-.0420	-.0190	-.0350	-.0770	.0120			
90.000	-.5430	-.0340	.0380	-.0260	-.0620	-.1120	-.0960			
105.000			.0590	-.0220	-.0630	-.1390	-.0720			
110.000										
120.000	-.5150	-.0450	.1750	-.0210	-.2060	-.1520	-.0510	-.0050		
135.000			.7240	.3270	-.1450	-.1330	-.1410	-.0190		
150.000	-.5070	-.0050	.8910	.4340	.0680	.0120	-.0460			
165.000	-.5320		.3530	.5280	.1490	.0580	-.1360			
180.000	-.5490	-.0260	.1990							

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0166	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
FWI															
.0000	1.4220	.9930	.4770	-.0750	.1170	.0190			-.0300		-.0740	-.0760	.0130	.0390	-.0970
20.000			.4020	-.0930	-.0620	.0110			-.0370		-.0800				
40.000			.3530	-.0950	-.0670	.0280			.0320		-.0910	-.0610	-.0610	-.0860	-.1320
55.000			.3160	-.1050	-.0720	.0310			.1590		.0270				
70.000			.2790	-.1240	-.1090	.1570			.2240		.0180	-.2320	-.2940	-.1570	-.0950
95.000		.8020	.2450	-.1580	-.1070	.2220			.2510		-.0390	-.2470	-.2790	-.1450	-.0260
120.000			.2910	-.0650	.0310	.3650			.2100		-.0670	-.2790	-.2170	-.1720	-.0300
142.000									-.0310						
150.000			.3670	.0620	.1670	.5870		.6390	.4720		-.2880	-.2290	.0220	-.1070	-.1190
157.000															
162.000									.4220						
165.000															
169.000															
172.000															
180.000	1.4220	.9970	.3985	.1960	.3000	.8970	1.0040		.5260		-.3520	-.2550	-.0770	-.1220	-.1540
LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

1347-  
1348-

-134-

TABULATED PRESSURE DATA - 1A98

DATE 20 SEP 73

(RDX-818)

AMES 97-717 1A9 CEA + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.980

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .5673 .6626 .7380 .7869 .8283 .8648 .9262 .9639 1.0015 1.0392

PMI .07990 .2940 .4560 .1520 .0710 -.1290

163.0000 -.1100 -.0540 .1240

180.0000

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.020

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .0075 .0168 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PMI .4570 -.0550 .1620 -.0280

.3740 -.0970 .1030 -.0650

.3090 -.0980 -.0760 -.0580

.2540 -.1250 -.1380 .0710

.1990 -.1930 -.1750 .1330

.1790 -.2160 -.1640 .2110

.2310 -.1040 -.0440 .2160

.3210 .0380 .1420 .5010

.157.0000

.162.0000

.165.0000

.169.0000

.172.0000

.180.0000

.5673 .6626 .7380 .7869 .8283 .8648 .9262 .9639 1.0015 1.0392

PMI .07990 .2940 .4560 .1520 .0710 -.1290

.163.0000 -.1100 -.0540 .1240

.180.0000

.185.0000

.190.0000

.195.0000

.199.0000

.204.0000

.209.0000

.214.0000

.219.0000

.224.0000

.229.0000

.234.0000

.239.0000

.244.0000

.249.0000

.254.0000

.259.0000

.264.0000

.269.0000

.274.0000

.279.0000

.284.0000

.289.0000

.294.0000

.299.0000

.304.0000

.309.0000

.314.0000

.319.0000

.324.0000

.329.0000

.334.0000

.339.0000

.344.0000

AMES 97-717 1A9 ORA + S3 + T9 ORBITER FUSELAGE

(R00618)

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.320

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3270	.3953	.5120
PHI															
.000	1.4760	.8880	.3920	.0680	.0700	.1710		.0690		.0470	-.0170	-.0520	-.0510	-.0140	
20.000		.4690	.1330	.1560	.1950		.0990		.0720		.0650	-.0130	-.0560	-.0550	
40.000			.6300	.1330	.4090	.2360	.1020			.2780					
55.000			.7190	.1670	.4430	.4190	.3170				.0730	-.0230	.0380	.1020	
70.000			.7490	.1940	.2860	.4530	.3720			.3240	.0420	-.0010	.0190	.0770	
90.000	1.2760		.7490	.2500	.2760	.4700	.5340			.2660	.0220	.0270	.0270	.0190	
120.000			.7330	.2850	.3130	.4780	.7310	.2150							
142.000									.9760	.0750	.0120	.0270	.0220	-.0110	
150.000			.6710	.2690	.3410	.6180	1.1940								
157.000								.8980							
162.000									.7410						
165.000										-.0550	.0770	.0420	.0280	-.0110	
169.000															
172.000							1.1120								
180.000	1.4760	1.0680	.4930	.2680	.2860	.6670		.9650		-.1510	-.0820	-.0590	-.1620	-.0760	
X/LB	.5873	.6626	.7380	.7069	.8283	.8848	.9262	.9639	1.0015	1.0392					

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.270

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3270	.3953	.5120
PHI															
.000	1.4930	.9270	.4720	.0710	.0210	.1790		.0770		.0770	.0030	.0220	-.0330	-.0210	
20.000		.4970	.1420	.0890	.2000		.0990		.0810		.0810				
40.000			.6090	.1410	.3760	.2410	.1010			.0420		-.0140	-.0240	-.0220	
55.000			.6650	.1620	.3500	.3920	.2330			.2330					
70.000			.6900	.1650	.2310	.4200	.3540			.2850	.0370	-.0530	.0070	.0570	
90.000	1.2230		.6840	.2010	.2140	.4450	.4880			.2870	.0180	-.0310	-.0270	.0110	
120.000			.6870	.2550	.2670	.4620	.6680			.2350	.0000	-.0190	-.0120	-.0120	

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B

AVES 97-707 1A9 22A + 53 + T9 ORBITER FUSELAGE (R00918)

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.270

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI																
142.000																
150.000																
157.000																
162.000																
165.000																
169.000																
172.000																
180.000																
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						

PHI																
142.000																
150.000																
157.000																
162.000																
165.000																
169.000																
172.000																
180.000																

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI																
142.000																
150.000																
157.000																
162.000																
165.000																
169.000																
172.000																
180.000																
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						

1.0590

TABULATED PRESSURE DATA - 1A98

DATE 25 SEP 73 AMES 97-707 1A9 OCA + S3 + T9 ORBITER FUSELAGE (RBO018)

MACH ( 2 ) = 2.000		BETAT ( 3 ) = -4.230		DEPENDENT VARIABLE CP	
SECTION ( 1 ) ORBITER FUSELAGE					
X/LB	PHI	X/LB	PHI	X/LB	PHI
180.000	1.5070	1.1260	.5140	.2720	.3040
					.6350
X/LB	.5873	.6626	.7380	.7869	.8283
					.8848
PHI	.0120	.0260	.0480	.0660	.0870
					.1020
40.000	.0140	.0210	.0290	.0370	.0450
					.0530
70.000	.0160	.0240	.0320	.0400	.0480
					.0560
90.000	.0180	.0260	.0340	.0420	.0500
					.0580
110.000	.0200	.0280	.0360	.0440	.0520
					.0600
120.000	.0220	.0300	.0380	.0460	.0540
					.0620
130.000	.0240	.0320	.0400	.0480	.0560
					.0640
140.000	.0260	.0340	.0420	.0500	.0580
					.0660
150.000	.0280	.0360	.0440	.0520	.0600
					.0680
160.000	.0300	.0380	.0460	.0540	.0620
					.0700
180.000	.0320	.0400	.0480	.0560	.0640

MACH ( 2 ) = 2.000		BETAT ( 4 ) = -.160		DEPENDENT VARIABLE CP	
SECTION ( 1 ) ORBITER FUSELAGE					
X/LB	PHI	X/LB	PHI	X/LB	PHI
180.000	1.5150	.9290	.4680	.0670	.0220
					.2040
PHI	.0000	.0075	.0188	.0339	.0632
					.1355
20.000	.0100	.0150	.0200	.0250	.0300
					.0350
40.000	.0200	.0300	.0400	.0500	.0600
					.0700
60.000	.0300	.0450	.0600	.0750	.0900
					.1050
80.000	.0400	.0600	.0800	.1000	.1200
					.1400
100.000	.0500	.0750	.1000	.1250	.1500
					.1700
120.000	.0600	.0900	.1200	.1500	.1800
					.2000
140.000	.0700	.1050	.1350	.1650	.1950
					.2150
160.000	.0800	.1200	.1500	.1800	.2100
					.2200
180.000	.0900	.1300	.1600	.1900	.2250
					.2300
PHI	.0000	.0050	.0100	.0150	.0200
					.0250
40.000	.0100	.0150	.0200	.0250	.0300
					.0350
60.000	.0200	.0300	.0400	.0500	.0600
					.0700
80.000	.0300	.0450	.0600	.0750	.0900
					.1050
100.000	.0400	.0600	.0800	.1000	.1200
					.1400
120.000	.0500	.0750	.1000	.1250	.1500
					.1700
140.000	.0600	.0900	.1200	.1500	.1800
					.2000
160.000	.0700	.1050	.1350	.1650	.1950
					.2150
180.000	.0800	.1200	.1500	.1800	.2100
					.2200
PHI	.0000	.0050	.0100	.0150	.0200
					.0250
40.000	.0100	.0150	.0200	.0250	.0300
					.0350
60.000	.0200	.0300	.0400	.0500	.0600
					.0700
80.000	.0300	.0450	.0600	.0750	.0900
					.1050
100.000	.0400	.0600	.0800	.1000	.1200
					.1400
120.000	.0500	.0750	.1000	.1250	.1500
					.1700
140.000	.0600	.0900	.1200	.1500	.1800
					.2000
160.000	.0700	.1050	.1350	.1650	.1950
					.2150
180.000	.0800	.1200	.1500	.1800	.2100
					.2200



DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A9B

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AMES 97-707 1A9 OCA + S3 + T9 ORBITER FUSELAGE

(R80818)

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.920

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000	-.0400			.2060	.5190	.1820	.1100	-.0260		
165.000	-.0160	-.0160		.1160						

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.960

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4970	.9320	.4950	.0740	.0230	.1820			.0910		.0790	.0190	.0290	-.0330	-.0040
20.000		.4370	.0720	-.0030	.1650				.0880		.0850				
40.000		.3960	.0720	.0110	.1310				.1160		.0540	.0120	-.0270	-.0440	-.0390
55.000		.3550	.0540	.0180	.1130				.1780		.1650				
70.000		.3270	-.0600	-.0390	.0890				.1400		.1730	-.0330	-.1140	-.0950	-.0470
90.000	.8600	.3260	-.0450	-.0400	.0610				.1890		.1350	-.0580	-.1030	-.1010	-.0800
120.000		.3960	.0570	.0490	.0410				.0890		-.0730	-.1620	-.0840	-.0440	-.0530
142.000										-.1210					
150.000		.4810	.1590	.1910	.4460				.5540		-.1500	-.1690	.0000	-.0150	-.0080
157.000									.8380						
162.000									.6370		-.1860	-.1460	-.0880	-.0860	-.0590
165.000									.7280						
169.000															
172.000									.9590		-.1440	-.1020	-.0420	-.0990	-.0500
180.000	1.4970	1.1310	.5110	.2670	.2980	.6380	1.0590								

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

X/LB	.000	.0480	.0930	.1280	.1660	.1710	.1820	.1780		
40.000	-.0080							-.1470		
70.000		-.0250	-.0540	-.0590	-.0190	-.0500	-.0700	-.1520		
90.000		-.0090	-.0430	.0110	-.0180	-.0700	-.0900			
105.000				.0410	-.0280	-.0190	-.0830	-.0930		
110.000								.0670		
120.000	-.0170	-.0190	.1810	-.0280	-.1540	-.1090	-.0770	-.0340		
135.000			.6780	.3550	-.0980	-.1040	-.1060			
150.000	-.0680	-.0780	.0430	.3310	.0960	.0420	.0210			
165.000	-.0710		.2270	.3330	.1330	.0600	-.0560			
180.000	-.0640	-.0650	.0580							

AMES 97-777 1A9 02A + S3 + T9 CRBITER FUSELAGE

(RUCB18)

WACH ( 2 ) = 2.555 BETAT ( 7 ) = 8.010

## SECTION (1) ORBITER FUSELAGE

**DEPENDENT VARIABLE CP**

[illegible]



AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

(RBC819) ( 24 MAY 73 )

## REFERENCE DATA

SECT =	2.4210 SQ. FT.	1000 =	26.5500 INCHES
UNIT =	39.0493 INCHES	1000 =	.0000 INCHES
UNIT =	39.0493 INCHES	2000 =	.0000 INCHES
SCALE =	.0350 SCALE		

### PARAMETRIC DATA

ALPHAT =	.000	ORBNIC =	.000
RUDDER =	-10.000	ELEVON =	.000
RUOFLR =	.000		

WACH ( 1 ) = 1.955  
BETAT ( 1 ) = -8.320

SECTION ( 1 ) ORBITER FUSELAGE

[illegible][illegible]

(R80819)

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270

MACH ( 1 ) = 1.555		BETAT ( 2 ) = -0.270														
SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP														
X/LB		.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI																
.000	1.3660	1.0110	.4930	-.0910	.0450	.0140				-.0390		-.1020	-.1270	-.0490	-.0550	-.0620
20.000			.5690	.0260	.1020	.0090				-.0390		-.1030				
40.000			.7130	.0680	.2770	.0430				-.0830		-.0730	-.1270	.0750	.0070	.0040
55.000			.7530	.1950	.3770	.1990				.1030		.1070				
70.000			.7320	.2530	.3670	.2400				.2240		.1100	-.1280	-.1870	.0170	.0210
90.000			.6520	.2130	.3510	.2730				.3640		.0920	-.1610	-.1710	-.0180	-.0050
120.000	1.1560		.5440	.1630	.3160	.3640				.5030		.0450	-.1760	-.1520	-.1390	-.0340
142.000			.4640	.0870	.2750	.7420				.7010		-.1140	-.1680	.0020	-.1380	-.0480
150.000									.9740							
157.000										.6210		-.2510	-.0930	-.1350	-.1240	-.0400
162.000										.4780						
165.000										.7020						
169.000																
172.000																
180.000	1.3660	.8720	.3010	.0930	.1960	.6840				.7020		-.3580	-.2090	-.1860	-.2240	-.1310

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP														
X/LB		.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI																
.000	1.3800	1.0300	.4910	-.1080	-.0580	.0330				.0180		-.0760	-.1230	-.1320	.0260	-.0380
20.000			.5460	-.0480	.0210	.0220				.0110		-.0720				
40.000			.6490	-.0920	.2060	.0510				-.0710		-.0530	-.1220	.0640	-.0230	.0350
55.000			.6730	.1140	.2910	.1790				.0790		.0870				
70.000			.6450	.1610	.2700	.2150				.2180		.0760	-.1530	-.2140	-.0330	-.0110
90.000			.5760	.1450	.2440	.2450				.3380		.0710	-.1850	-.1960	-.0760	-.0290
120.000	1.0940		.4910	.1110	.2520	.3970				.4570		.0340	-.1950	-.1810	-.1590	-.0410

DATE 20 SEP 73

1. The following information is being furnished to you for your information only. It is not to be used for any other purpose.

$$\text{BETAT}(3) = -4.240$$

INDEPENDENT VARIABLE	DEPENDENT VARIABLE CP
AGE	CP
SEX	CP
HEIGHT	CP
WEIGHT	CP
SKIN COLOR	CP
RELIGION	CP
EDUCATION	CP
INCOME	CP
RESIDENCE	CP
EMPLOYMENT	CP
HEALTH	CP
ATTITUDE	CP
PERSONALITY	CP
INTERESTS	CP
VALUES	CP
OPINIONS	CP
BEHAVIOR	CP
EMOTIONS	CP
THOUGHTS	CP
FEELINGS	CP
ATTENTION	CP
CONSCIOUSNESS	CP
PERCEPTION	CP
REASONING	CP
IMAGINATION	CP
CREATIVITY	CP
INTELLIGENCE	CP
KNOWLEDGE	CP
SKILLS	CP
ABILITIES	CP
CHARACTERISTICS	CP
QUALITIES	CP
ATTRIBUTES	CP
PROPERTIES	CP
FEATURES	CP
ASPECTS	CP
ELEMENTS	CP
COMPONENTS	CP
PARTS	CP
SECTIONS	CP
SECTORS	CP
DIVISIONS	CP
DEPARTMENTS	CP
UNITS	CP
CELLS	CP
GROUPS	CP
CLASSES	CP
CATEGORIES	CP
TYPES	CP
KINDS	CP
VARIETIES	CP
FORMS	CP
SHAPES	CP
FIGURES	CP
NUMBERS	CP
QUANTITIES	CP
MEASUREMENTS	CP
VALUES	CP
RATIOS	CP
PERCENTAGES	CP
FRACTIONS	CP
DECIMALS	CP
NUMERALS	CP
FIGURES	CP
CHARACTERS	CP
PERSONS	CP
INDIVIDUALS	CP
BEINGS	CP
CREATURES	CP
ORGANISMS	CP
LIVING THINGS	CP
PLANTS	CP
ANIMALS	CP
INSECTS	CP
BIRDS	CP
FISH	CP
REPTILES	CP
AMPHIBIANS	CP
MAMMALS	CP
PRIMATES	CP
MONKEYS	CP
APES	CP
HUMAN BEINGS	CP
PEOPLE	CP
CITIZENS	CP
RESIDENTS	CP
INHABITANTS	CP
OCCUPANTS	CP
USERS	CP
OPERATORS	CP
MANAGERS	CP
LEADERS	CP
HEADS	CP
CHIEFS	CP
BOSS	CP
OWNER	CP
PROPRIETOR	CP
MANUFACTURER	CP
PRODUCER	CP
DEVELOPER	CP
DESIGNER	CP
ARCHITECT	CP
ENGINEER	CP
SCIENTIST	CP
RESEARCHER	CP
ANALYST	CP
CONSULTANT	CP
ADVISOR	CP
MENTOR	CP
TEACHER	CP
PROFESSOR	CP
LECTURER	CP
INSTRUCTOR	CP
TUTOR	CP
TRAINER	CP
COACH	CP
MANAGER	CP
ADMINISTRATOR	CP
EXECUTIVE	CP
OFFICIAL	CP
EMPLOYEE	CP
WORKER	CP
LABORER	CP
OPERARY	CP
TECHNICIAN	CP
ARTISAN	CP
CRAFTSMAN	CP
ARTIST	CP
DESIGNER	CP
CREATOR	CP
PRODUCER	CP
MANUFACTURER	CP
DEVELOPER	CP
DESIGNER	CP
ARCHITECT	CP
ENGINEER	CP
SCIENTIST	CP
RESEARCHER	CP
ANALYST	CP
CONSULTANT	CP
ADVISOR	CP
MENTOR	CP
TEACHER	CP
PROFESSOR	CP
LECTURER	CP
INSTRUCTOR	CP
TUTOR	CP
TRAINER	CP
COACH	CP
MANAGER	CP
ADMINISTRATOR	CP
EXECUTIVE	CP
OFFICIAL	CP
EMPLOYEE	CP
WORKER	CP
LABORER	CP
OPERARY	CP
TECHNICIAN	CP
ARTISAN	CP
CRAFTSMAN	CP
ARTIST	CP
DESIGNER	CP
CREATOR	CP
PRODUCER	CP
MANUFACTURER	CP
DEVELOPER	CP
DESIGNER	CP
ARCHITECT	CP
ENGINEER	CP
SCIENTIST	CP
RESEARCHER	CP
ANALYST	CP
CONSULTANT	CP
ADVISOR	CP
MENTOR	CP
TEACHER	CP
PROFESSOR	CP
LECTURER	CP
INSTRUCTOR	CP
T	

SECTION 1	SECTION 2	SECTION 3	SECTION 4	SECTION 5	SECTION 6	SECTION 7	SECTION 8	SECTION 9	SECTION 10	SECTION 11	SECTION 12	SECTION 13	SECTION 14	SECTION 15	SECTION 16	SECTION 17	SECTION 18	SECTION 19	SECTION 20	SECTION 21	SECTION 22	SECTION 23	SECTION 24	SECTION 25	SECTION 26	SECTION 27	SECTION 28	SECTION 29	SECTION 30	SECTION 31	SECTION 32	SECTION 33	SECTION 34	SECTION 35	SECTION 36	SECTION 37	SECTION 38	SECTION 39	SECTION 40	SECTION 41	SECTION 42	SECTION 43	SECTION 44	SECTION 45	SECTION 46	SECTION 47	SECTION 48	SECTION 49	SECTION 50	SECTION 51	SECTION 52	SECTION 53	SECTION 54	SECTION 55	SECTION 56	SECTION 57	SECTION 58	SECTION 59	SECTION 60	SECTION 61	SECTION 62	SECTION 63	SECTION 64	SECTION 65	SECTION 66	SECTION 67	SECTION 68	SECTION 69	SECTION 70	SECTION 71	SECTION 72	SECTION 73	SECTION 74	SECTION 75	SECTION 76	SECTION 77	SECTION 78	SECTION 79	SECTION 80	SECTION 81	SECTION 82	SECTION 83	SECTION 84	SECTION 85	SECTION 86	SECTION 87	SECTION 88	SECTION 89	SECTION 90	SECTION 91	SECTION 92	SECTION 93	SECTION 94	SECTION 95	SECTION 96	SECTION 97	SECTION 98	SECTION 99	SECTION 100																																																																																																																																				
142.000	151.000	157.000	162.000	165.000	169.000	172.000	180.000	185.000	190.000	195.000	200.000	205.000	210.000	215.000	220.000	225.000	230.000	235.000	240.000	245.000	250.000	255.000	260.000	265.000	270.000	275.000	280.000	285.000	290.000	295.000	300.000	305.000	310.000	315.000	320.000	325.000	330.000	335.000	340.000	345.000	350.000	355.000	360.000	365.000	370.000	375.000	380.000	385.000	390.000	395.000	400.000	405.000	410.000	415.000	420.000	425.000	430.000	435.000	440.000	445.000	450.000	455.000	460.000	465.000	470.000	475.000	480.000	485.000	490.000	495.000	500.000	505.000	510.000	515.000	520.000	525.000	530.000	535.000	540.000	545.000	550.000	555.000	560.000	565.000	570.000	575.000	580.000	585.000	590.000	595.000	600.000	605.000	610.000	615.000	620.000	625.000	630.000	635.000	640.000	645.000	650.000	655.000	660.000	665.000	670.000	675.000	680.000	685.000	690.000	695.000	700.000	705.000	710.000	715.000	720.000	725.000	730.000	735.000	740.000	745.000	750.000	755.000	760.000	765.000	770.000	775.000	780.000	785.000	790.000	795.000	800.000	805.000	810.000	815.000	820.000	825.000	830.000	835.000	840.000	845.000	850.000	855.000	860.000	865.000	870.000	875.000	880.000	885.000	890.000	895.000	900.000	905.000	910.000	915.000	920.000	925.000	930.000	935.000	940.000	945.000	950.000	955.000	960.000	965.000	970.000	975.000	980.000	985.000	990.000	995.000	1000.000	1005.000	1010.000	1015.000	1020.000	1025.000	1030.000	1035.000	1040.000	1045.000	1050.000	1055.000	1060.000	1065.000	1070.000	1075.000	1080.000	1085.000	1090.000	1095.000	1100.000	1105.000	1110.000	1115.000	1120.000	1125.000	1130.000	1135.000	1140.000	1145.000	1150.000	1155.000	1160.000	1165.000	1170.000	1175.000	1180.000	1185.000	1190.000	1195.000	1200.000	1205.000	1210.000	1215.000	1220.000	1225.000	1230.000	1235.000	1240.000	1245.000	1250.000	1255.000	1260.000	1265.000	1270.000	1275.000	1280.000	1285.000	1290.000	1295.000	1300.000

[illegible]

REFAT (A) = -.140

	DEPENDENT VARIABLE CP	SIZE AGE
1980-1981	1.00	1.00
1981-1982	1.00	1.00
1982-1983	1.00	1.00
1983-1984	1.00	1.00
1984-1985	1.00	1.00
1985-1986	1.00	1.00
1986-1987	1.00	1.00
1987-1988	1.00	1.00
1988-1989	1.00	1.00
1989-1990	1.00	1.00
1990-1991	1.00	1.00
1991-1992	1.00	1.00
1992-1993	1.00	1.00
1993-1994	1.00	1.00
1994-1995	1.00	1.00
1995-1996	1.00	1.00
1996-1997	1.00	1.00
1997-1998	1.00	1.00
1998-1999	1.00	1.00
1999-2000	1.00	1.00
2000-2001	1.00	1.00
2001-2002	1.00	1.00
2002-2003	1.00	1.00
2003-2004	1.00	1.00
2004-2005	1.00	1.00
2005-2006	1.00	1.00
2006-2007	1.00	1.00
2007-2008	1.00	1.00
2008-2009	1.00	1.00
2009-2010	1.00	1.00
2010-2011	1.00	1.00
2011-2012	1.00	1.00
2012-2013	1.00	1.00
2013-2014	1.00	1.00
2014-2015	1.00	1.00
2015-2016	1.00	1.00
2016-2017	1.00	1.00
2017-2018	1.00	1.00
2018-2019	1.00	1.00
2019-2020	1.00	1.00
2020-2021	1.00	1.00
2021-2022	1.00	1.00
2022-2023	1.00	1.00
2023-2024	1.00	1.00
2024-2025	1.00	1.00
2025-2026	1.00	1.00
2026-2027	1.00	1.00
2027-2028	1.00	1.00
2028-2029	1.00	1.00
2029-2030	1.00	1.00
2030-2031	1.00	1.00
2031-2032	1.00	1.00
2032-2033	1.00	1.00
2033-2034	1.00	1.00
2034-2035	1.00	1.00
2035-2036	1.00	1.00
2036-2037	1.00	1.00
2037-2038	1.00	1.00
2038-2039	1.00	1.00
2039-2040	1.00	1.00
2040-2041	1.00	1.00
2041-2042	1.00	1.00
2042-2043	1.00	1.00
2043-2044	1.00	1.00
2044-2045	1.00	1.00
2045-2046	1.00	1.00
2046-2047	1.00	1.00
2047-2048	1.00	1.00
2048-2049	1.00	1.00
2049-2050	1.00	1.00
2050-2051	1.00	1.00
2051-2052	1.00	1.00
2052-2053	1.00	1.00
2053-2054	1.00	1.00
2054-2055	1.00	1.00
2055-2056	1.00	1.00
2056-2057	1.00	1.00
2057-2058	1.00	1.00
2058-2059	1.00	1.00
2059-2060	1.00	1.00
2060-2061	1.00	1.00
2061-2062	1.00	1.00
2062-2063	1.00	1.00
2063-2064	1.00	1.00
2064-2065	1.00	1.00
2065-2066	1.00	1.00
2066-2067	1.00	1.00
2067-2068	1.00	1.00
2068-2069	1.00	1.00
2069-2070	1.00	1.00
2070-2071	1.00	1.00
2071-2072	1.00	1.00
2072-2073	1.00	1.00
2073-2074	1.00	1.00
2074-2075	1.00	1.00
2075-2076	1.00	1.00
2076-2077	1.00	1.00
2077-2078	1.00	1.00
2078-2079	1.00	1.00
2079-2080	1.00	1.00
2080-2081	1.00	1.00
2081-2082	1.00	1.00
2082-2083	1.00	1.00
2083-2084	1.00	1.00
2084-2085	1.00	1.00
2085-2086	1.00	1.00
2086-2087	1.00	

[illegible]





DATE 25 SEP 73

## TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

(RBC819)

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0215	1.0392
PHI										
165.000		-.1100		.2930	.4920	.1400	.0540	-.1390		
180.000		-.2020	-.0630	.1030						

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.040

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0200	.0075	.0188	.0339	.0632	.1355	.1556	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
1.3450	.9920	.4940	-.0530	.1480	-.0380										
20.000		.4020	-.1020	.1050	-.0610										
40.000		.3300	-.0990	-.0740											
55.000		.2670	-.1170	-.1450	.0320										
70.000		.1980	-.1770	-.1780	.1040										
90.000	.6910	.1570	-.2180	-.1780	.1740										
120.000		.1710	-.1390	-.0910	.3050										
142.000		.2410	-.0360	.0640	.4060										
150.000						.5690									
157.000															
162.000															
165.000															
169.000															
172.000															
180.000	1.3450	.8760	.2860	.0920	.2130	.6440									

AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

(R80819)

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.300

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	1.3840	.8980	.4550	.0870	.0790	.1530			.0530	.0270	-.0240	-.0590	-.0550	-.0550	-.0030
20.000			.5190	.1530	.2190	.1680			.0800	.0270	-.0380	-.0140	-.0250	-.0050	.1110
40.000			.6540	.1550	.4970	.2190			.0880		.0380	-.0140	-.0250	-.0050	.1110
55.000			.7150	.1710	.6090	.3770			.2880		.2260				
70.000			.7430	.1930	.3330	.3970			.3310		.2780	.0510	-.0340	.0170	.5810
90.000			.7150	.2360	.2680	.4190			.4230		.2990	.0210	-.0230	-.0090	.0490
120.000	1.2210		.6540	.2360	.2540	.4200			.6870	.2100	.2170	-.0040	-.0540	-.0350	-.0190
142.000											-.0170	-.0180	.0000	-.0360	-.0470
150.000			.5740	.2030	.2470	.4810	1.0590								
157.000									.8080						
162.000									.6350						
165.000											-.0620	.0420	.0060	-.0280	-.0470
169.000															
172.000															
180.000	1.3840	.9800	.3980	.1750	.1960	.4970	1.0210		.8340		-.1810	-.1220	-.1510	-.2120	-.1030

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	1.4140	.9060	.4840	.0940	.0420	.1770			.0670	.0520	-.0140	-.0280	-.0600	-.0650	-.0250
20.000			.5210	.1690	.1230	.1840			.0820	.0620	-.0290	-.0240	-.0350	-.0860	
40.000			.6260	.1690	.3670	.2210			.0920		.0290	.0030	-.0240	-.0350	.0860
55.000			.6680	.1780	.4390	.3670			.2630		.1690				
70.000			.6820	.1790	.7360	.3840			.3050		.2530	.0230	-.0620	-.0180	.0440
90.000	1.1760		.6480	.1790	.2070	.4010			.3960		.2700	.0010	-.0490	-.0390	.0030
120.000			.6080	.1970	.2290	.3950			.6540		.1910	-.0220	-.0590	-.0550	-.0430





[illegible]

DATE 23 SEP 73 TABULATED PRESSURE DATA - 1A9B

AMES 97-707 1A9 OGA + S3 + T9 ORBITER FUSELAGE (RBOB19)

MACH ( 2 ) = 2.0000 BETAT ( 4 ) = -.140

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000	-.0600	-.0740	-.0720	-.0900	-.0380	-.0630	-.0770			
90.000	-.0370	-.0370	.0240	-.0170	-.0610	-.0810				
105.000		.0620	.0370	-.0180	-.0690	-.0980				.0680
110.000										
120.000	-.0160	-.0260	.0190	.0270	-.0630	-.0690	-.0610	-.0070		
135.000		.4280	.3240	-.0640	-.0250	.0230				
150.000	-.0300	-.0210	.0780	.2960	.0190	.0630	.0580			
165.000	-.0350		.1830	.3520	.1860	.1310	-.0290			
180.000	-.0430	-.0240	.0140							

MACH ( 2 ) = 2.0000 BETAT ( 5 ) = 3.930

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0672	.1355	.1556	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
20.000	1.4180	.9200	.5120	.0970	.0160	.2020			.1100		.1060	.0320	-.0110	-.0820	-.0730
40.000		.4900	.1150	.0150	.2160				.1400		.0930	-.0030	-.0450	-.1190	-.1410
60.000		.4610	.1140	.0580	.1940				.1350		.1280				
80.000		.4130	.0780	.0830					.1500		.1490	-.0480	-.1240	-.1200	-.0720
100.000		.3680	-.0190	.0260	.0680				.1990		.1270	-.0750	-.1210	-.1230	-.0870
120.000	.8630	.3460	-.0280	-.0140	.0900				.2640		.0110	-.1050	-.1100	-.0940	-.0680
140.000		.3770	.0640	.0340	.0840				.2050	-.1130					
160.000									.5350	-.1510	-.1680	.0000	-.0230	-.0490	
180.000		.4210	.0980	.1420	.2340			.7070							
200.000									.5820		-.2010	-.1710	-.0960	-.0160	-.0530
220.000									.6480						
240.000															
260.000									.8650		-.1710	-.1390	-.0860	-.0880	-.0860
280.000															
300.000															

MACH ( 2 ) = 2.0000 BETAT ( 5 ) = 3.930

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0672	.1355	.1556	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
40.000	-.0160	.0030	-.1140	-.1490	-.0750	-.1320			-.1300						
60.000	-.0140	.0030	-.0850	-.0890	-.0620	-.0580	-.0760	-.0930							
80.000		-.0410	-.0720	-.0670	-.0440	-.0390	-.0780	-.0990							
100.000			.0270	-.0150	-.0390	-.0910	-.1090								
120.000															
140.000	-.0440	-.0400	.1520	-.0150	-.1040	-.1010	-.0780	-.0390							
160.000			.5660	.3440	-.0980	-.0810	-.0590								
180.000	-.0820	-.0590	.1630	.4210	.0280	.0140	-.0230								

DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-737 1A9 O2A + S3 + T9 ORBITER FUSELAGE (RBCB19)

MACH ( 2 ) = 2.500 BETAT ( 5 ) = 3.930

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PMI  
165.000 -.0660 .1660 .4210 .1190 .0490 -.0490  
180.000 -.0990 -.0970 .0760

MACH ( 2 ) = 2.500 BETAT ( 6 ) = 5.980

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0612 .1355 .1506 .1581 .1732 .1938 .2259 .2711 .3200 .3953 .5120

PMI  
.000 1.4170 .9540 .5290 .0980 .0030 .1880  
20.000 .4880 .0970 -.0290 .1970  
40.000 .4300 .0960 -.0140 .1410  
55.000 .3550 .0960 .0030 .0610  
70.000 .3080 -.0600 -.0360 .0410  
90.000 .2880 -.0690 -.0560 .0290  
120.000 .3230 .0170 -.0030 .0160  
142.000 .3820 .0860 .1110 .3320  
150.000  
157.000  
162.000  
165.000  
169.000  
172.000  
180.000 1.4170 1.0100 .4050 .1750 .2030 .5350 .8450  
X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PMI  
.000 -.0850  
40.000 -.0820  
70.000 -.0650  
90.000 -.0500  
105.000  
110.000  
120.000  
135.000  
150.000  
165.000  
180.000

PMI  
.000 -.1420  
40.000 -.1100  
70.000 -.0790  
90.000 -.0510  
105.000 -.0460  
110.000  
120.000  
135.000  
150.000  
165.000  
180.000



AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

(RBC020) ( 24 MAY 73 )

## REFERENCE DATA

SMOY = 2.4210 96.FT.      300P = 28.5300 INCHES  
 LOP = 39.0490 INCHES      700P = .0000 INCHES  
 BMOY = 39.0490 INCHES      2700P = .0000 INCHES  
 SCALE = .0020 SCALE

ALPHAT =	4.0000	ORBNIC =	.0000
RUDDER =	-10.0000	ELEVON =	.0000
RUSSFL =	.0000		

## PARAMETRIC DATA

**WACH ( 1 ) = 1.555**  
**BETAT ( 1 ) = -8.300**

SECTION (1) ORBITER FUSELAGE

[illegible]

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98

(R03820)

AMES 97-707 1A9 OCA + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	0.0000	0.0075	0.0188	0.0339	0.0602	0.1355	0.1506	0.1581	0.1732	0.1958	0.2259	0.2711	0.3200	0.3953	0.5120
PM1															
0.000	1.3570	1.5600		-0.0930	-0.0910	0.0370			-0.0350		-0.0460	-0.1320	-0.1210	-0.1100	-0.0120
20.000			0.6510	0.0330	0.0110	0.0600			-0.0870		-0.0170	-0.0840	-0.0330	0.0250	0.0290
40.000			0.7620	0.1450	0.0230	0.0230			-0.0970		0.0320	-0.0840	-0.0330	0.0250	0.0290
60.000			0.7790	0.2420	0.3570	0.1560			0.0610		0.020	-0.0840	-0.1450	-0.0520	-0.0680
80.000			0.7340	0.2940	0.3210	0.1870			0.1140		0.1580	-0.1310	-0.1590	-0.0900	-0.0480
100.000			0.6280	0.2150	0.3210	0.2120			0.2880		0.0770	-0.1310	-0.1590	-0.0900	-0.0480
120.000	1.1190		0.4730	0.1340	0.2650	0.2410			0.4690		-0.0050	-0.2000	-0.1860	-0.1510	-0.1190
140.000			0.3750	0.0190	0.1910	0.6230			0.6300		-0.1630	-0.2140	0.0000	-0.1710	-0.1070
160.000								0.9000							
180.000									0.5520		-0.2620	-0.1380	-0.1810	-0.1430	-0.0990
200.000									0.4050						
220.000									0.6160		-0.3870	-0.2660	-0.2270	-0.2570	-0.2120
240.000	1.3070	0.7580	0.2080	0.0170	0.1070	0.5760									
260.000								0.9570							
280.000	0.5875	0.6626	0.7380	0.7669	0.8283	0.8848	0.9262	0.9639	1.0015	1.0392					

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	0.0000	0.0075	0.0188	0.0339	0.0602	0.1355	0.1506	0.1581	0.1732	0.1958	0.2259	0.2711	0.3200	0.3953	0.5120
PM1															
0.000	1.3570	1.5600		-0.0930	-0.0910	0.0370			-0.0350		-0.0460	-0.1320	-0.1210	-0.1100	-0.0120
20.000			0.6510	0.0330	0.0110	0.0600			-0.0870		-0.0170	-0.0840	-0.0330	0.0250	0.0290
40.000			0.7620	0.1450	0.0230	0.0230			-0.0970		0.0320	-0.0840	-0.0330	0.0250	0.0290
60.000			0.7790	0.2420	0.3570	0.1560			0.0610		0.020	-0.0840	-0.1450	-0.0520	-0.0680
80.000			0.7340	0.2940	0.3210	0.1870			0.1140		0.1580	-0.1310	-0.1590	-0.0900	-0.0480
100.000			0.6280	0.2150	0.3210	0.2120			0.2880		0.0770	-0.1310	-0.1590	-0.0900	-0.0480
120.000	1.1190		0.4730	0.1340	0.2650	0.2410			0.4690		-0.0050	-0.2000	-0.1860	-0.1510	-0.1190
140.000			0.3750	0.0190	0.1910	0.6230			0.6300		-0.1630	-0.2140	0.0000	-0.1710	-0.1070
160.000								0.9000							
180.000									0.5520		-0.2620	-0.1380	-0.1810	-0.1430	-0.0990
200.000									0.4050						
220.000									0.6160		-0.3870	-0.2660	-0.2270	-0.2570	-0.2120
240.000	1.3070	0.7580	0.2080	0.0170	0.1070	0.5760									
260.000								0.9570							
280.000	0.5875	0.6626	0.7380	0.7669	0.8283	0.8848	0.9262	0.9639	1.0015	1.0392					

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	0.0000	0.0075	0.0188	0.0339	0.0602	0.1355	0.1506	0.1581	0.1732	0.1958	0.2259	0.2711	0.3200	0.3953	0.5120
PM1															
0.000	1.3570	1.5600		-0.0930	-0.0910	0.0370			-0.0350		-0.0460	-0.1320	-0.1210	-0.1100	-0.0120
20.000			0.6510	0.0330	0.0110	0.0600			-0.0870		-0.0170	-0.0840	-0.0330	0.0250	0.0290
40.000			0.7620	0.1450	0.0230	0.0230			-0.0970		0.0320	-0.0840	-0.0330	0.0250	0.0290
60.000			0.7790	0.2420	0.3570	0.1560			0.0610		0.020	-0.0840	-0.1450	-0.0520	-0.0680
80.000			0.7340	0.2940	0.3210	0.1870			0.1140		0.1580	-0.1310	-0.1590	-0.0900	-0.0480
100.000			0.6280	0.2150	0.3210	0.2120			0.2880		0.0770	-0.1310	-0.1590	-0.0900	-0.0480
120.000	1.1190		0.4730	0.1340	0.2650	0.2410			0.4690		-0.0050	-0.2000	-0.1860	-0.1510	-0.1190
140.000			0.3750	0.0190	0.1910	0.6230			0.6300		-0.1630	-0.2140	0.0000	-0.1710	-0.1070
160.000								0.9000							
180.000									0.5520		-0.2620	-0.1380	-0.1810	-0.1430	-0.0990
200.000									0.4050						
220.000									0.6160		-0.3870	-0.2660	-0.2270	-0.2570	-0.2120
240.000	1.3070	0.7580	0.2080	0.0170	0.1070	0.5760									
260.000								0.9570							
280.000	0.5875	0.6626	0.7380	0.7669	0.8283	0.8848	0.9262	0.9639	1.0015	1.0392					

AFMS 97-2017 IA9 02A + S3 + T9 CRB1 TER FUSELAGE (RBCB221)

$$\text{MAGN} ( 1 ) = 1.559 \quad \text{DETAT} ( 3 ) = -4.220$$

DEPENDENT VARIABLE CP

## SECTION : 1) ORBITER FUSELAGE

NAME	1970	1975	1980	1982	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433
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[illegible][illegible]

WACH ( 1 ) =	1.553	BETAT ( 4 ) =	-.130
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DEPENDENT VARIABLE CP

## SECTION : 1) ORBITER FUSELAGE

NAME	0000	0075	0160	0239	0322	0405	0481	0552	0629	0700	0771	0840	0909	0975	1040	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	3100	3150	3200	3250	3300	3350	3400	3450	3500	3550	3600	3650	3700	3750	3800	3850	3900	3950	4000	4050	4100	4150	4200	4250	4300	4350	4400	4450	4500	4550	4600	4650	4700	4750	4800	4850	4900	4950	5000	5050	5100	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850	5900	5950	6000	6050	6100	6150	6200	6250	6300	6350	6400	6450	6500	6550	6600	6650	6700	6750	6800	6850	6900	6950	7000	7050	7100	7150	7200	7250	7300	7350	7400	7450	7500	7550	7600	7650	7700	7750	7800	7850	7900	7950	8000	8050	8100	8150	8200	8250	8300	8350	8400	8450	8500	8550	8600	8650	8700	8750	8800	8850	8900	8950	9000	9050	9100	9150	9200	9250	9300	9350	9400	9450	9500	9550	9600	9650	9700	9750	9800	9850	9900	9950	10000
NAME	0000	0075	0160	0239	0322	0405	0481	0552	0629	0700	0771	0840	0909	0975	1040	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	3100	3150	3200	3250	3300	3350	3400	3450	3500	3550	3600	3650	3700	3750	3800	3850	3900	3950	4000	4050	4100	4150	4200	4250	4300	4350	4400	4450	4500	4550	4600	4650	4700	4750	4800	4850	4900	4950	5000	5050	5100	5150	5200	5250	5300	5350	5400	5450	5500	5550	5600	5650	5700	5750	5800	5850	5900	5950	6000	6050	6100	6150	6200	6250	6300	6350	6400	6450	6500	6550	6600	6650	6700	6750	6800	6850	6900	6950	7000	7050	7100	7150	7200	7250	7300	7350	7400	7450	7500	7550	7600	7650	7700	7750	7800	7850	7900	7950	8000	8050	8100	8150	8200	8250	8300	8350	8400	8450	8500	8550	8600	8650	8700	8750	8800	8850	8900	8950	9000	9050	9100	9150	9200	9250	9300	9350	9400	9450	9500	9550	9600	9650	9700	9750	9800	9850	9900	9950	10000
NAME	0000	0075	0160	0239	0322	0405	0481	0552	0629	0700	0771	0840	0909	0975	1040	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	3100	3150	3200	3250	3300	3350	34																																																																																																																																				





DATE 20 SEP 73

## TABULATED PRESSURE DATA - 1A98

(RBC820)

AWES 97-707 1A9 02A + S3 + T9 ORB' TER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.960

## SECTION : 1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

N/LB	5073	.0626	.7380	.7869	.8283	.8848	.9262	.9839	1.0015	1.0392
PMI										
70.000	-.1110	-.1280	-.1300	-.1080	-.10210	-.10760	-.1110			
90.000	-.0760	-.1040	-.1020	-.1000	-.10410	-.0750	-.1040			
110.000				.0220	-.0430	-.1120	-.1040		.0370	
120.000	-.0310	-.0350	.1870	-.0420	-.1540	-.1130	-.0910		-.0350	
130.000			.4780	.2980	-.1040	-.0640	-.0630			
140.000	-.0270	-.0300	.2820	.3460	.0310	-.0280	-.0450			
150.000	-.0420		.2940	.3810	.0920	.0040	-.1580			
160.000	-.1350	-.0980	.1270							

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.010

## SECTION : 1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

N/LB	.0200	.0075	.0188	.0339	.0612	.1355	.1516	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PMI															
20.000	1.3380	1.0720	.5490	-.0770	-.0200	.0170			-.0250		-.0760	-.1300	-.1080	-.1180	-.0080
40.000			.4790	-.0990	-.0970	.0130			-.0280		-.1360	-.1420	-.1570	-.0990	-.0500
60.000			.4320	-.0960	-.1190	.0170			-.0400		-.0370				
80.000			.3590	-.0870	-.1390	.0260			.0180		-.0180	-.2640	-.3340	-.2050	-.0730
100.000			.2790	-.1210	-.1510	.0920			.1490		-.0510	-.2900	-.3230	-.2450	-.0790
120.000	.7600		.2070	-.1730	-.1380	.1190			.2250		-.1170	-.3110	-.2970	-.2350	-.0940
140.000			.1740	-.1380	-.0820	.3040			.1390						
160.000			.1980	-.1020	.0130	.4640			-.3130		-.3280	-.2870	.0000	-.1830	-.1790
180.000							.6450		.4180						
200.000									.3300		-.6000	-.5170	-.1700	-.1810	-.2010
220.000									.4030						
240.000						.8930			.5970						
260.000	1.3380	.7840	.2030	.0140	.1160	.5920									
280.000	.5073	.0626	.7380	.7869	.8283	.8848	.9262	.9839	1.0015	1.0392					
N/LB															
PMI															
40.000	-.0430			.0030	-.0760	-.1620	-.1520		-.0640						
60.000	-.0870	.1280		.0030	-.0790	-.0190	-.0640	-.1510							
80.000		-.0190	-.0680	-.0790	-.0460	-.0910	-.0690	-.1230	-.1450						
100.000		.0170	-.0170	.1090	.0030	-.0770	-.1510	-.1540							
120.000									-.0240						
140.000		.0470	.0320	.2780	.0430	-.1890	-.1540	-.1310	-.0970						
160.000				.5690	.3750	-.1360	-.1070	-.1060							
180.000		-.0310	.0270	.2860	.3280	-.0410	-.0230	-.0520							





DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A98

(RBO820)

AMES 97-707 1A9 Q2A + S3 + 19 ORBITER FUSELAGE

MACH ( 2 ) = 2.000

BETAT ( 2 ) = -6.240

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PMI															
142.000															
130.000															
127.000															
162.000															
165.000															
169.000															
172.000															
180.000															
X/LB	.5873	.5026	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

PMI

-.0680

-.0920

-.0740

-.0510

-.0310

-.0140

-.0010

-.0010

-.0010

-.0010

-.0010

-.0010

-.0010

-.0010

MACH ( 2 ) = 2.000

BETAT ( 3 ) = -4.200

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PMI															
142.000															
130.000															
127.000															
162.000															
165.000															
169.000															
172.000															
180.000															
X/LB	.5873	.5026	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

PMI

-.0680

-.0920

-.0740

-.0510

-.0310

-.0140

-.0010

-.0010

-.0010

-.0010

-.0010

-.0010

-.0010

-.0010

DATE 25 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

(RBOC20)

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	PMI	180.000	1.3670	.0990	.3350	.1200	.1360	.4220	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
0.0000	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120	
PMI	180.000	1.3670	.0990	.3350	.1200	.1360	.4220	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120	
180.000	1.3670	.0990	.3350	.1200	.1360	.4220	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120		
X/LB	.5873	.6626	.7360	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392						
PMI	.5873	.6626	.7360	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392						
40.000	.0490	.0290	.0160	.0080	.0040	.0020	.0010	.0005	.0002	.0001						
70.000	.0630	.0390	.0220	.0120	.0060	.0030	.0015	.0008	.0004	.0002						
90.000	.0740	.0460	.0280	.0160	.0080	.0040	.0020	.0010	.0005	.0002						
110.000	.0820	.0500	.0300	.0180	.0090	.0050	.0025	.0012	.0006	.0003						
130.000	.0880	.0560	.0340	.0200	.0100	.0060	.0030	.0015	.0008	.0004						
150.000	.0920	.0590	.0360	.0220	.0110	.0070	.0035	.0018	.0010	.0005						
170.000	.0950	.0610	.0380	.0240	.0120	.0080	.0040	.0020	.0012	.0006						
190.000	.0970	.0630	.0400	.0260	.0130	.0090	.0045	.0022	.0013	.0007						
210.000	.0980	.0640	.0410	.0270	.0140	.0100	.0050	.0025	.0014	.0008						

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -1.130

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3270	.3953	.5120
PMI	1.3660	1.0410	.6630	.1460	-.0170	.2840		.2420		.1160	.0260	.0260	-.0670	-.1010	.0240
20.000			.6570	.1980	.0020	.2590		.2140		.0490				.0490	
40.000			.6310	.1990	.1110	.2240		.1120		.0210	.0040		-.0420	-.0810	.0160
55.000			.5770	.2150	.1480	.1880		.1370		.0720					
70.000			.5200	.0940	.1870	.1640		.1640		.1300	-.0380	-.1260		-.1120	-.0560
90.000		.9610	.4570	.0510	.0810	.2020		.2370		.1390	-.0730	-.1280		-.1230	-.0750
120.000			.4160	.0720	.0700	.1840		.3940		.0830	-.1110	-.1270		-.1340	-.0960
150.000			.4020	.0770	.1100	.3510		.6180		-.0650	-.1260	.0220	-.0870	-.0830	
160.000							.7430								
162.000								.5780				-.1170	-.0740	-.0600	-.0780
165.000								.5690							
169.000															
172.000							.7730								
180.000	1.3660	.9010	.3270	.1140	.1300	.3840									
X/LB	.5873	.6626	.7360	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392					
PMI	.5873	.6626	.7360	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392					
40.000	.0490	.0290	.0160	.0080	.0040	.0020	.0010	.0005	.0002	.0001					
70.000	.0630	.0390	.0220	.0120	.0060	.0030	.0015	.0008	.0004	.0002					
90.000	.0740	.0460	.0280	.0160	.0080	.0040	.0020	.0010	.0005	.0002					
110.000	.0820	.0500	.0300	.0180	.0090	.0050	.0025	.0012	.0006	.0003					
130.000	.0880	.0560	.0340	.0200	.0100	.0060	.0030	.0015	.0008	.0004					
150.000	.0920	.0590	.0360	.0220	.0110	.0070	.0035	.0018	.0010	.0005					
170.000	.0950	.0610	.0380	.0240	.0120	.0080	.0040	.0020	.0012	.0006					
190.000	.0970	.0630	.0400	.0260	.0130	.0090	.0045	.0022	.0013	.0007					
210.000	.0980	.0640	.0410	.0270	.0140	.0100	.0050	.0025	.0014	.0008					



DATE 25 SEP 73

TABULATED PRESSURE DATA - 1A9B

AMES 97-707 1A9 CGA + S3 + T9 ORBITER FUSELAGE

(R00020)

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

165.000 -.0990 .1340 .4050 .0170 .5270 -.0700  
180.000 -.0830 -.0810 .0350

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.990

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3933 .5120

PHI

.000 1.3200 .9780 .5820 .1120 -.0100 .1710 .0780  
20.000 .5510 .1120 -.0510 .2020 .0830  
40.000 .4720 .1090 .0370 .1580 .0870  
55.000 .3860 .1010 .0170 .1470 .0850  
70.000 .3070 .1460 .0410 .0330 .1330  
90.000 .2550 .0790 .1950 .0200 .2080  
120.000 .2560 .0350 .1470 .1220 .1400  
142.000 .2970 .0170 .0460 .2670 .3780  
150.000 .2970 .0170 .0460 .2670 .3780  
157.000 .2970 .0170 .0460 .2670 .3780  
162.000 .2970 .0170 .0460 .2670 .3780  
165.000 .2970 .0170 .0460 .2670 .3780  
169.000 .2970 .0170 .0460 .2670 .3780  
172.000 .2970 .0170 .0460 .2670 .3780  
180.000 1.3200 .6750 .3050 .0920 .1220 .4150 .7130

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.000 -.0630  
40.000 -.0110  
70.000 .0350  
90.000 .0890  
105.000 .0690  
110.000 .0620  
120.000 .0610  
135.000 .0620  
150.000 .0620  
165.000 .0620  
180.000 .0620





JAMES 97-707 IA9 Q2A + S3 + T9 OR31 TER FUSELAGE

(R50821) ( 24 MAY 73 )

## REFERENCE DATA

3REF =	2.4210 SQ.FT.	XARP =	28.5300 INCHES
1ST =	39.8490 INCHES	YARP =	.0000 INCHES
2REF =	39.8490 INCHES	ZARP =	.0000 INCHES
SCALE =	.0000 SCALE		

## PARAMETRIC DATA

ALPHAT =	6.'000	ORBNIC =	.000
BUDDER =	-10.000	ELEVON =	.000
SUPFLR =	.000		

WACH ( 1 ) = 1.555  
BETAT ( 1 ) = -8.330

## SECTION (1) ORBITER FUSELAGE

**DEPENDENT VARIABLE CP**

[illegible]

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1498

AVES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

(RBC621)

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.290

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2780	1.1270	.5700	-.0630	-.0880	.0100			-.0740	-.0420	-.1470	-.1270	-.1920	.0180	
20.000			.7030	.0820	-.0050	-.0010			-.0840	-.0160	-.0970	.0020	.0300	.0470	
40.000			.8360	.1980	.2360	-.0180			-.0730	-.0190	-.0970	.0020	.0300	.0470	
55.000			.8470	.2840	.3420	.1310			.0410	.1750					
70.000			.7380	.3290	.2970	.1590			.0860	.1760	-.0850	-.1630	-.0400	-.0310	
90.000		1.0950	.6140	.2040	.3060	.1860			.1930	.0910	-.1360	-.1780	-.0970	-.0650	
120.000			.4380	.1060	.2380	.2010			.4470	-.0150	-.2150	-.2170	-.1730	-.1430	
142.000										-.0230					
150.000			.3280	-.0160	.1530	.5580			.5960	-.1960	-.2350	.0020	-.1930	-.1250	
157.000							.8650								
162.000									.5230						
165.000									.3700						
169.000							.8670								
172.000			.1630	-.0280	.0730	.5210			.5770						
180.000	1.2780	.7070	.1630	-.0280	.0730	.5210									
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0092					
											-.4010	-.2860	-.2500	-.2940	-.1780

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3940	1.2070	.5340	-.1550	-.1870	.0530			.0500	-.0530	-.1900	-.1950	.0180	.0470	
20.000			.6530	-.0230	-.1070	.0120			-.0710	-.0070	-.0970	.0020	.0300	.0470	
40.000			.7820	.0510	.1500	-.5220			-.1150	.0160	-.0860	.0560	-.0030	.1980	
55.000			.7900	.1580	.2660	.1050			.0210	.1330					
70.000			.6780	.2060	.2120	.1350			.0680	.0700	-.1250	-.1920	-.0610	-.0560	
90.000		1.0330	.5360	.1120	.2210	.1630			.2290	.0490	-.1690	-.2140	-.1160	-.1890	
120.000			.3780	.0640	.1760	.1930			.4160	-.0360	-.2360	-.2290	-.2040	-.1250	





AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE (RBO0821)

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.980

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000	-.1230	-.1480	-.1670	-.0970	-.0410	-.0900	-.1220			
90.000	-.0720	-.1010	-.0230	-.0530	-.0670	-.0990	-.1220			
105.000			.0370	.0080	-.0590	-.1330	-.1260			
110.000							.0140			
120.000	-.0340	-.0200	.1820	.0110	-.1320	-.1200	-.1060	-.0760		
135.000			.4020	.3110	-.1180	-.0670	-.0570			
150.000	-.0260	-.0170	.2480	.3290	-.0190	-.0330	-.0450			
165.000	-.0310		.2700	.3150	.0970	.0260	-.1560			
180.000	-.1190	-.0480	.1020							

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.040

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
20.000	1.3140	1.0910	.5690	-.0940	-.0800	.0070			-.0170	-.0830	-.1270	-.1110	-.1070	-.0970	
40.000			.5180	-.0950	-.1190	.0210			-.0260	-.1300	-.1670	-.1350	-.0230	-.0180	
55.000			.4590	-.0950	-.1340	.0230			-.0510	-.1330	-.1670	-.1350	-.0230	-.0180	
70.000			.3880	-.0810	-.1430	.0390			-.0140	-.1420	-.1670	-.1350	-.0230	-.0180	
90.000			.2860	-.1200	-.1560	.0650			.1180	-.0220	-.2630	-.3270	-.2030	-.0620	
105.000	.7470		.2090	-.1770	-.1400	.1190			.2100	-.0030	-.2860	-.3250	-.2530	-.0030	
120.000			.1430	-.1570	-.0970	.2590			.1330	-.1250	-.3170	-.3070	-.2350	-.0910	
142.000									-.3130						
150.000			.1530	-.1150	-.0210	.4400			.4000	-.3320	-.3040	.0000	-.1930	-.1670	
157.000							.6330								
162.000									.3070						
165.000															
169.000									.3700						
172.000							.8260								
180.000	1.3140	.7320	.1550	-.0280	.0710	.5430			.5500						

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.040

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
40.000	.0000														
55.000	.1630		.0710	-.0410	-.1740	-.1340			-.0700	-.0300	-.1140				
70.000	-.0230	-.0920	-.1020	-.0670	-.0860	-.1250	-.1630								
90.000	.0190	-.0230	.0310	-.0630	-.0910	-.1470	-.1610								
105.000			.0750	-.0060	-.0910	-.1670	-.1700								
110.000									-.0440						
120.000	.0510	.0330	.2830	.0080	-.1820	-.1580	-.1470								
135.000			.5680	.3370	-.1430	-.1150	-.1020								
150.000	.0050	.0300	.2830	.3070	-.0710	-.0330	-.0640								

DATE 20 SEP 75

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 79 ORBITER FUSELAGE

(R00021)

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.040

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9282 .9639 1.0015 1.0392

PMI  
165.000 -.0360 .3160 .4030 .0690 .0410 -.1480  
180.000 -.1480 -.0590 .1250

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 6.110

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9282 .9639 1.0015 1.0392

PMI  
.000 1.2940 1.1020 .5290 -.0990 -.0650 -.0170  
20.000 .4440 -.1520 -.1690 -.0190  
40.000 .3740 -.1500 -.1810 -.0410  
55.000 .2950 -.1530 -.2130 -.0340  
70.000 .1970 -.1840 -.2190 -.0820  
90.000 .1240 -.2330 -.1990 .1120  
120.000 .0820 -.1980 -.1400 .2290  
142.000 .1110 -.1360 -.0430 .3310  
150.000  
157.000 .5670  
162.000 .3480  
165.000 .5180  
169.000  
172.000  
180.000 1.2940 .7170 .1350 -.0410 .0680 .4730  
X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9282 .9639 1.0015 1.0392PMI  
.000 .0520  
40.000 .0660  
70.000 -.0740  
90.000 -.0390  
105.000  
110.000  
120.000  
135.000  
150.000  
165.000  
180.000  
X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9282 .9639 1.0015 1.0392  
PMI  
.000 .0520  
40.000 .0660  
70.000 -.0740  
90.000 -.0390  
105.000  
110.000  
120.000  
135.000  
150.000  
165.000  
180.000  
X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9282 .9639 1.0015 1.0392

SECTION ( 1 ) ORBITER FUSELAGE		UL DISTANCE														
X/LB	Y/LB	.0000	.0075	.0150	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
FMI																
	.0000	1.2930	1.0210	.6400	.1430	.0210	.1710			.0615		.0240	-.0300	-.0780	-.1650	-.0910
	.20.000			.6890	.2630	.1430	.1270			.0560		-.0240		-.1260	.0890	.0890
	.40.000			.7550	.2810	.4010	.1350			.0370		-.0200	-.0630			
	.55.000			.7480	.3360	.4800	.2630			.1780		.0910	-.0150	-.0890	-.0350	.0310
	.70.000			.7210	.3140	.3910	.2840			.2050		.1680	-.0460	-.0970	-.0780	-.0110
	.90.000			.6380	.1950	.3030	.2940			.2320		.2060	-.0740	-.1210	-.1170	-.0820
	120.000			.5240	.1560	.2020	.2820			.5250		.0970	-.0740	-.1210		





AWES 97-707 1A9 02A + S3 + 19 ORBITER FUSELAGE (RBO821)

MACH ( 2 ) = 2.500 BETAT ( 3 ) = -4.210

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3340	.8440	.2910	.0820	.1030	.3770			.7260		-.2140	-.1770	-.1310	-.1720	-.1100
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0770							-.0660		-.0480					
40.000	.0600	.0460		.1880	.1480	.1070	-.0750			-.1810					
70.000		-.0700	-.1080	-.1190	-.0950	-.0530	-.0920	-.0970							
90.000		-.0570	-.0990	-.0810	.0050	-.0540	-.0470	-.0890							
105.000				.0830	.1170	-.0040	-.0650	-.0950							
110.000								.0590							
120.000		-.0690	-.0690	.4280	.1930	-.0170	-.0610	-.0750	-.0320						
135.000			.2070	.1930	-.0790	-.1300	-.1070								
150.000		-.0380	-.0560	.0540	.0370	-.1150	-.0370	.0290							
165.000		-.0550		.0510	.1940	.0790	.0830	-.0380							
180.000		-.0860	-.0830	.0220											

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.120

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3230	1.0680	.7070	.1610	.0300	.2580			.2170	.0750	.0170	-.0760	-.0930	.0370	
20.000		.6990	.2140	.0740	.2440				.1790	-.1070					
40.000		.6520	.2150	.1030	.2170				.1430	-.0240	-.0250	-.0280	-.0980	.0370	
55.000		.5890	.2300	.1560	.1760				.1160	.0430					
70.000		.5210	.1010	.1040	.1770				.1410	.1120	-.0720	-.1390	-.1070	-.0730	
90.000	.9340	.4430	.0480	.0760	.1830				.2030	.1230	-.0940	-.1390	-.1340	-.1090	
120.000		.3840	.0500	.0590	.2070				.3280	.0610	-.1120	-.1390	-.1540	-.1020	
142.000		.3560	.0460	.0830	.3150				.5800	-.0780	-.1350	.0000	-.1070	-.0920	
150.000								.7070							
157.000									.5400						
162.000									.5230						
169.000										-.2010	-.1210	-.0910	-.0830	-.0880	
172.000					.6990										
180.000	1.3230	.8430	.2810	.0770	.1020	.3490			.7190	-.2000	-.1710	-.0570	-.0660	-.1180	
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.1500							-.0670		-.0460					
40.000	.1010	.1030		.0480	.0000	.0110	-.1410			-.0660					



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TABULATED PRESSURE DATA - 1A98

(RBC821)

ANES 97-707 1A9 ORA + 33 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.975

SECTION ( 1 ) ORBITER FUSELAGE  
DEPENDENT VARIABLE CP  
X/LB .5873 .6626 .7380 .7869 .8283 .848 .9262 .9639 1.0015 1.0392

PHI  
185.000 -.1000 .1260 .3780 .5090 .5270 -.0730  
180.000 -.0880 -.1000 .5140

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 0.020

SECTION ( 1 ) ORBITER FUSELAGE  
DEPENDENT VARIABLE CP  
X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3270 .3953 .5120

PHI  
.000 1.2060 .9780 .6000 .1310 .0180 .1770 .0740  
20.000 .5630 .1220 -.0420 .1930 .0780  
40.000 .4860 .1230 -.0260 .1580 .0750  
55.000 .3960 .1230 -.0120 .0630 .0650  
70.000 .3090 -.0340 -.0440 .0390 .1140  
85.000 .2490 -.0790 -.0530 .0200 .2110  
100.000 .2280 -.0490 -.0510 .0510 .1110  
120.000 .2540 -.0070 .0190 .3670  
140.000 .1900 .0160 .4280  
160.000 .1620 .0470 .4810  
180.000 .1720 .0620 .6480  
190.000 .1600 .0880 .6950  
200.000 .1720 .1260 .9639 1.0015 1.0392

X/LB .5873 .6626 .7380 .7869 .8283 .848 .9262 .9639 1.0015 1.0392

PHI  
.000 -.0580 .0470 .0160 -.0160 -.0980 -.1340  
40.000 .0470 .0470 .0470 .0470 .0470 .0470  
60.000 .0470 .0470 .0470 .0470 .0470 .0470  
80.000 .0470 .0470 .0470 .0470 .0470 .0470  
100.000 .0470 .0470 .0470 .0470 .0470 .0470  
120.000 .0470 .0470 .0470 .0470 .0470 .0470  
140.000 .0470 .0470 .0470 .0470 .0470 .0470  
160.000 .0470 .0470 .0470 .0470 .0470 .0470  
180.000 .0470 .0470 .0470 .0470 .0470 .0470  
200.000 .0470 .0470 .0470 .0470 .0470 .0470

X/LB .5873 .6626 .7380 .7869 .8283 .848 .9262 .9639 1.0015 1.0392

PHI  
.000 -.0580 .0470 .0160 -.0160 -.0980 -.1340  
40.000 .0470 .0470 .0470 .0470 .0470 .0470  
60.000 .0470 .0470 .0470 .0470 .0470 .0470  
80.000 .0470 .0470 .0470 .0470 .0470 .0470  
100.000 .0470 .0470 .0470 .0470 .0470 .0470  
120.000 .0470 .0470 .0470 .0470 .0470 .0470  
140.000 .0470 .0470 .0470 .0470 .0470 .0470  
160.000 .0470 .0470 .0470 .0470 .0470 .0470  
180.000 .0470 .0470 .0470 .0470 .0470 .0470  
200.000 .0470 .0470 .0470 .0470 .0470 .0470

X/LB .5873 .6626 .7380 .7869 .8283 .848 .9262 .9639 1.0015 1.0392

PHI  
.000 -.0580 .0470 .0160 -.0160 -.0980 -.1340  
40.000 .0470 .0470 .0470 .0470 .0470 .0470  
60.000 .0470 .0470 .0470 .0470 .0470 .0470  
80.000 .0470 .0470 .0470 .0470 .0470 .0470  
100.000 .0470 .0470 .0470 .0470 .0470 .0470  
120.000 .0470 .0470 .0470 .0470 .0470 .0470  
140.000 .0470 .0470 .0470 .0470 .0470 .0470  
160.000 .0470 .0470 .0470 .0470 .0470 .0470  
180.000 .0470 .0470 .0470 .0470 .0470 .0470  
200.000 .0470 .0470 .0470 .0470 .0470 .0470

X/LB .5873 .6626 .7380 .7869 .8283 .848 .9262 .9639 1.0015 1.0392

PHI  
.000 -.0580 .0470 .0160 -.0160 -.0980 -.1340  
40.000 .0470 .0470 .0470 .0470 .0470 .0470  
60.000 .0470 .0470 .0470 .0470 .0470 .0470  
80.000 .0470 .0470 .0470 .0470 .0470 .0470  
100.000 .0470 .0470 .0470 .0470 .0470 .0470  
120.000 .0470 .0470 .0470 .0470 .0470 .0470  
140.000 .0470 .0470 .0470 .0470 .0470 .0470  
160.000 .0470 .0470 .0470 .0470 .0470 .0470  
180.000 .0470 .0470 .0470 .0470 .0470 .0470  
200.000 .0470 .0470 .0470 .0470 .0470 .0470

X/LB .5873 .6626 .7380 .7869 .8283 .848 .9262 .9639 1.0015 1.0392

PHI  
.000 -.0580 .0470 .0160 -.0160 -.0980 -.1340  
40.000 .0470 .0470 .0470 .0470 .0470 .0470  
60.000 .0470 .0470 .0470 .0470 .0470 .0470  
80.000 .0470 .0470 .0470 .0470 .0470 .0470  
100.000 .0470 .0470 .0470 .0470 .0470 .0470  
120.000 .0470 .0470 .0470 .0470 .0470 .0470  
140.000 .0470 .0470 .0470 .0470 .0470 .0470  
160.000 .0470 .0470 .0470 .0470 .0470 .0470  
180.000 .0470 .0470 .0470 .0470 .0470 .0470  
200.000 .0470 .0470 .0470 .0470 .0470 .0470

X/LB .5873 .6626 .7380 .7869 .8283 .848 .9262 .9639 1.0015 1.0392

$$\text{BETAT} ( 7 ) = 8.570$$

2.000

**PLATE 1**

**SECTION (1) ORBITER FUSELAGE**

DEPENDENT VARIABLE CP

[illegible]

(REC822) ( 24 MAY 73 )

JAMES 97-757 1A9 C2A + S3 + T9 CREITER FUSELAGE

## PARAMETRIC DATA

ALPHAT =	8.000	ORBINC =	.000
RUDDER =	-10.000	ELEVON =	.000
RUDEFL =	.000		

## REFERENCE DATA

20.5300 INCHES	XMRP =	2.4210 SQ.FT.
.0000 INCHES	YMRP =	39.8490 INCHES
.0000 INCHES	ZMRP =	39.8490 INCHES
	SCALE =	.0300 SCALE

```

MACH ( 1 ) = 1.555
BETAT ( 1 ) = -8.360

```

DEPENDENT VARIABLE C<sup>2</sup>

[illegible][illegible]

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE (RBO022)

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.310

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2990	1.2260	.5820	-.1270	-.1730	.0320		.0040			-.0480	-.1420	-.1150	-.0720	.0690
20.000			.7580	.0420	-.0950	.0090		.0070			-.0440				
40.000			.9000	.1840	.2100	-.0620		-.0230			-.0480	-.0770	.0890	.0710	.0850
55.000			.9600	.2970	.3300	.1090		.0230			.0070				
70.000			.7640	.3520	.2480	.1350		.0590			.1780	-.1060	-.1730	-.0270	-.0180
90.000			.6040	.1910	.2640	.1500		.1320			.1230	-.1440	-.2070	-.0780	-.0720
120.000			.3920	.0820	.2050	.1510		.4460			-.0420	-.2170	-.2410	-.1850	-.1760
142.000											-.0380				
150.000			.2750	-.0490	.1290	.4930		.8230			-.2320	-.2490	.0000	-.2150	-.1360
157.000								.4900							
162.000								.3350			-.2720	-.1740	-.2050	-.1870	-.1180
165.000															
169.000								.7480							
172.000															
180.000			.6400	.1120	-.0580	.0390	.4590	.5340			-.4130	-.3080	-.2720	-.3330	-.2290

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.000	.0290														
40.000	.1990	.4570	.3010	.2490	-.0430	-.2660		-.0390			-.0300				
70.000		-.1190	-.1410	-.2150	-.1220	-.0090	-.1310	-.1160			.0240				
90.000		-.1200	-.1070	-.1670	-.0360	-.0210	-.1350	-.1630							
105.000				.0970	.1580	-.0210	-.1500	-.1850							
110.000								.0340							
120.000		-.1780	-.1580	.5970	.1580	-.0810	-.1310	-.1550			-.0960				
135.000			.2070	.1300	-.2300	-.1910	-.0440								
150.000		-.1120	.0080	.1230	.0920	-.0840	.0000	.0030							
165.000		-.0880		.1460	.2140	.0570	.0410	-.1210							
180.000		-.1130	-.0100	.1560											

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4320	1.2160	.5530	-.1290	-.1990	.0580		.0580			-.0570	-.1350	-.1420	-.0430	.0840
20.000			.6850	-.0620	-.1130	.0100		.0140			-.0420				
40.000			.8260	.0220	.1440	-.0510		-.0470			-.0270	-.1210	.0670	.0260	.1460
55.000			.8290	.1830	.2480	.0880		-.0010			.0610				
70.000			.7190	.2390	.1680	.1130		.0450			.1310	-.1420	-.2130	-.0840	-.0540
90.000			.5260	.0910	.1890	.1390		.1200			.0650	-.1750	-.2320	-.1130	-.0950
120.000			.3380	.0280	.1410	.1500		.4220			-.0630	-.2440	-.2580	-.2280	-.1640



TABLE 1. AVERAGED PRESSURE DATA - 1A9E

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$$\text{BETAT}(4) = -.110$$

**MACH (1) = 1.535**

### SECTION 11 ORBITER FUSELAGE

DEPENDENT VARIABLE CP

[illegible][illegible]

**BETAT (5) = 3.9423**

**WACH (1) = 1.555**

## SECTION 11 ORBITER FUSELAGE

DEPENDENT VARIABLE CP

[illegible]

1250  
1250





DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A9B

(RBOB22)

AMES 97-707 1A9 OGA + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.060

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		.0330		.2950	.3510	.0870	.0130	-.1860		
180.000		-.1150	-.0320	.1570						

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.120

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		.0330		.2950	.3510	.0870	.0130	-.1860		
180.000		-.1150	-.0320	.1570						

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		.0330		.2950	.3510	.0870	.0130	-.1860		
180.000		-.1150	-.0320	.1570						

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A9B

(RBOB22)

AMES 97-757 1A9 O2A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.330

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0632	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI	1.2890	1.0770	.6700	.0680	-.0090	.0680	.0680	.0160	.0160	-.0500	-.0200	-.0510	-.0350	-.0180	
20.000			.7630	.2710	.1310	.0180	.0180	-.0200	-.0200	-.0570	-.0260	-.0420	.0920	.1420	
40.000			.8440	.3900	.4180	.0870	.0870	-.0080	-.0080	.0990	.1520	.0060	-.0690	.0100	.0670
55.000			.8350	.4320	.5130	.2630	.2630	.2050	.2050	.2170	-.0340	-.0920	-.0380	.0120	.0120
70.000			.7990	.4510	.4340	.2830	.2830	.2230	.2230	.0690	-.0740	-.1160	-.1350	-.0820	-.0820
90.000		1.1410	.6760	.2640	.4040	.2850	.2850	.5220	.5220	.1360	-.0990	-.1060	.0000	-.1100	-.0990
120.000			.4950	.1610	.2370	.2500	.2500	.6370	.6370	-.0780	-.0440	-.0740	-.1170	-.0890	
142.000			.3740	.0730	.1470	.2970	.2970	.6030	.6030	-.0780	-.0440	-.0740	-.1170	-.0890	
150.000								.4320	.4320						
162.000								.5830	.5830	-.2230	-.1860	-.2710	-.2440	-.1500	
165.000							.6650								
169.000															
172.000															
180.000	1.2890	.7220	.2070	.0340	.0680	.4010	.4010			1.0315	1.0392				
X/LB	.5875	.6826	.7383	.7869	.8283	.8848	.9262	.9639	1.0315	1.0392					

PHI  
40.000  
70.000  
90.000  
105.000  
115.000  
120.000  
135.000  
150.000  
165.000  
180.000

	-.0340	.1400	-.0370	-.0180	-.0490	.1310	.2650	.0220	-.0320	-.0620	-.0210				
	.1190	.1400	-.0370	-.0180	-.0490	.1310	.2650	.0220	-.0320	-.0620	-.0210				
		.1400	-.0370	-.0180	-.0490	.1310	.2650	.0220	-.0320	-.0620	-.0210				
			-.0370	-.0180	-.0490	.1310	.2650	.0220	-.0320	-.0620	-.0210				
				-.0180	-.0490	.1310	.2650	.0220	-.0320	-.0620	-.0210				
					-.0490	.1310	.2650	.0220	-.0320	-.0620	-.0210				
						.1310	.2650	.0220	-.0320	-.0620	-.0210				
							.2650	.0220	-.0320	-.0620	-.0210				
								.0220	-.0320	-.0620	-.0210				
									-.0320	-.0620	-.0210				
										-.0620	-.0210				
											-.0210				

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.280

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0632	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI	1.2890	1.0740	.6990	.1260	-.0020	.1750	.1750	.0620	.0620	.0260	-.0310	-.0600	-.0350	-.0300	
20.000			.7630	.2770	.1190	.0770	.0770	.0420	.0420	-.0530	-.0260	-.0510	.0530	.1140	
40.000			.8170	.3360	.3870	.0930	.0930	.0040	.0040	.0460	.0600	-.0150	.0530	.1140	
55.000			.7990	.3920	.4670	.2320	.2320	.1480	.1480	.1280	.0270	-.0980	-.0520	.0270	.0270
70.000			.7480	.3460	.3720	.2520	.2520	.1740	.1740	.0860	-.0590	-.1130	-.0750	-.0230	.0230
90.000		1.1020	.6250	.2060	.3490	.2580	.2580	.1990	.1990	.0580	-.0900	-.1320	-.1450	-.0940	
120.000			.4850	.1360	.1910	.2410	.2410	.5010	.5010						





DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A9B

(RBC922)

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.110

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5673	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000	-.1150	-.1310	-.1370	-.1040	-.0800	-.1180	-.1300			
90.000	-.0810	-.1060	-.0340	-.0270	-.0530	-.0920	-.1250			
105.000			.0480	.0280	-.0490	-.1040	-.1300			
110.000							.0200			
120.000	-.0680	-.0610	.2150	.1150	-.0660	-.0980	-.1050			
135.000			.1580	.1740	-.1130	-.0670	-.0290			
150.000	-.0620	-.0110	.0850	.0970	.0140	.0020	-.0110			
165.000	-.0580		.1070	.1440	.0780	.0390	-.0770			
180.000	-.0580	-.0360								

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 4.000

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0168	.0339	.0672	.1355	.1506	.1581	.1732	.1958	.2239	.2711	.3200	.3953	.5120
PHI															
.000	1.2880	1.0940	.7260	.1190	-.0530	.2230			.1390		.0530	-.10250	-.0610	-.1080	-.0470
20.000		.6860	.1530	-.0580	.2760				.1720		.0170	-.0470	-.0990	-.1470	.0500
40.000		.6020	.1540	.0210	.2110				.1080			-.0470			
55.000		.5070	.1700	.0340	.1060				.0740		-.0420				
70.000		.4060	.0270	-.0060	.0870				.1010		.0620	-.1070	-.1570	-.1630	-.1140
90.000	.7930	.3130	-.0320	.0040	.0730				.1730		.0710	-.1220	-.1750	-.1630	-.1180
120.000		.2580	-.0270	-.0280	.0870				.1880		.0250	-.1450	-.1630	-.1600	-.1290
142.000			.2540	-.0150	.0240	.1620			-.1170		-.1600	-.1720	.0220	-.0970	-.1160
150.000								.5030							
157.000									.4210						
162.000											-.2360	-.1690	-.1010	-.1670	-.1150
165.000									.4650						
169.000															
172.000						.6190									
180.000	1.2880	.7780	.2330	.0400	.0680	.3140			.6240		-.2230	-.1860	-.1510	-.1600	-.1210

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 4.000

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0168	.0339	.0672	.1355	.1506	.1581	.1732	.1958	.2239	.2711	.3200	.3953	.5120
PHI															
.000	1.2880	1.0940	.7260	.1190	-.0530	.2230			.1390		.0530	-.10250	-.0610	-.1080	-.0470
20.000		.6860	.1530	-.0580	.2760				.1720		.0170	-.0470	-.0990	-.1470	.0500
40.000		.6020	.1540	.0210	.2110				.1080			-.0470			
55.000		.5070	.1700	.0340	.1060				.0740		-.0420				
70.000		.4060	.0270	-.0060	.0870				.1010		.0620	-.1070	-.1570	-.1630	-.1140
90.000	.7930	.3130	-.0320	.0040	.0730				.1730		.0710	-.1220	-.1750	-.1630	-.1180
120.000		.2580	-.0270	-.0280	.0870				.1880		.0250	-.1450	-.1630	-.1600	-.1290
142.000			.2540	-.0150	.0240	.1620			-.1170		-.1600	-.1720	.0220	-.0970	-.1160
150.000								.5030							
157.000									.4210						
162.000											-.2360	-.1690	-.1010	-.1670	-.1150
165.000									.4650						
169.000															
172.000						.6190									
180.000	1.2880	.7780	.2330	.0400	.0680	.3140			.6240		-.2230	-.1860	-.1510	-.1600	-.1210

AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

(RB0822)

MACH ( 2 ) = 2.000

BETAT ( 5 ) = 4.000

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

## PHI

185.0000 -.09990 .1110 .3410 .0030 .0230 -.0800  
180.0000 -.09970 -.1090 -.0010

MACH ( 2 ) = 2.000

BETAT ( 6 ) = 6.000

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

## PHI

.0000 1.2820 1.0600 .7040 .1050 -.0630 .1580 .0800 -.0200 -.0650 -.0540 -.0440  
20.0000 .6320 .0990 -.0690 .2320 .1090 .0070  
40.0000 .5270 .0680 -.0720 .1990 .0830 -.0730 -.1020 -.1240 -.1360 .0100  
55.0000 .4250 .1000 -.0450 .0980 .0450 -.0130  
70.0000 .3260 -.0180 -.0710 .0500 .0540 -.0540 -.1720 -.1770 -.1210  
90.0000 .7330 .2450 -.0800 -.0540 .0140 .1760 .0630 -.1280 -.1810 -.1120  
120.0000 .2000 -.0640 -.0560 .0200 .1140 .0130 -.1540 -.1710 -.1580 -.1350  
142.0000 .2130 -.0320 -.0030 .1520 -.2020 -.2030 .0000 -.0880 -.1280  
150.0000 .5020  
157.0000 .3770  
162.0000 .4410  
165.0000 .6250  
169.0000 .3740  
172.0000 .0280 .0580  
180.0000 1.2820 .7530 .2270 .0280 .0580 .3740 .5970 .2260 -.1950 -.2390 -.2280 -.1340

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

## PHI

.0000 -.0370 .1480 -.0130 -.0520 -.0730 -.1150 -.0780 -.0670  
40.0000 .0160 -.1130 -.1330 -.1250 -.1010 -.1040 -.1230 -.1310 -.1000  
70.0000 -.0780 -.1010 -.0480 -.0810 -.0850 -.1190 -.1310  
90.0000 .105.0000 -.0150 -.0480 -.0850 -.1200 -.1410  
110.0000 -.0710 -.0690 .1350 .0030 -.1260 -.1250 -.1070 -.0690  
120.0000 .4180 .3670 -.1260 -.0950 -.0760  
135.0000 -.0940 -.0730 .0820 .2150 -.1010 -.0720 -.0650  
150.0000 -.1200 .0790 .3550 -.1000 -.1060 -.0890  
165.0000 -.1650 -.1500 -.0940

ANES 02-777 1A9 02A + S3 + T9 CREITER FUSELAGE

(RDCB22)

$$\text{MACRO ( 2 )} = 2.5000$$

DEPENDENT VARIABLE CP

[illegible]







AMES 97-717 1A9 2A + S3 + T9 CRBI TER FUSELAGE (REC823)

MACH ( 1 ) = 1.555  
BETAT ( 3 ) = -4.29%

SECTION ( 1 ) ORBITER FUSELAGE	DEPENDENT VARIABLE CP
1	0.000
2	0.000
3	0.000
4	0.000
5	0.000
6	0.000
7	0.000
8	0.000
9	0.000
10	0.000
11	0.000
12	0.000
13	0.000
14	0.000
15	0.000
16	0.000
17	0.000
18	0.000
19	0.000
20	0.000
21	0.000
22	0.000
23	0.000
24	0.000
25	0.000
26	0.000
27	0.000
28	0.000
29	0.000
30	0.000
31	0.000
32	0.000
33	0.000
34	0.000
35	0.000
36	0.000
37	0.000
38	0.000
39	0.000
40	0.000
41	0.000
42	0.000
43	0.000
44	0.000
45	0.000
46	0.000
47	0.000
48	0.000
49	0.000
50	0.000
51	0.000
52	0.000
53	0.000
54	0.000
55	0.000
56	0.000
57	0.000
58	0.000
59	0.000
60	0.000
61	0.000
62	0.000
63	0.000
64	0.000
65	0.000
66	0.000
67	0.000
68	0.000
69	0.000
70	0.000
71	0.000
72	0.000
73	0.000
74	0.000
75	0.000
76	0.000
77	0.000
78	0.000
79	0.000
80	0.000
81	0.000
82	0.000
83	0.000
84	0.000
85	0.000
86	0.000
87	0.000
88	0.000
89	0.000
90	0.000
91	0.000
92	0.000
93	0.000
94	0.000
95	0.000
96	0.000
97	0.000
98	0.000
99	0.000
100	0.000

[illegible]

### III

[illegible]

**WACH ( 1 ) = 1.555**  
**BETAT ( 4 ) = -.170**

SECTION (1) ORBITER FUSELAGE

[illegible]

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.175

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP														
X/LB		.0220	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI																
180.000	1.4950	1.1140	.5140	.3040	.4060	1.0850				.8730		-.2350	-.1720	.0230	-.0150	-.00290
X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						
PHI																
180.000	1.4950	1.1140	.5140	.3040	.4060	1.0850										
X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						
PHI																
180.000	1.4950	1.1140	.5140	.3040	.4060	1.0850										
X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						

PHI																
180.000	1.4950	1.1140	.5140	.3040	.4060	1.0850										
X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						
PHI																
180.000	1.4950	1.1140	.5140	.3040	.4060	1.0850										
X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						
PHI																
180.000	1.4950	1.1140	.5140	.3040	.4060	1.0850										
X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP														
X/LB		.0220	.0075	.0188	.0339	.0632	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI																
180.000	1.4910	.9930	.4120	-.1360	.0470	-.0040										
20.000			.3790	-.1410	-.0370	-.0130										
40.000			.3670	-.1410	-.0360	.0570										
55.000			.3690	-.1390	-.0430	.1570										
70.000			.3440	-.1420	-.0630	.2190										
90.000		.9100	.3420	-.0920	-.0360	.3350										
120.000			.4040	.0160	.1160	.4310										
142.000			.4960	.1680	.2910	.7290										
150.000																
157.000																
162.000																
165.000																
169.000																
172.000																
180.000	1.4910	1.1090	.5090	.2970	.4050	1.0430										
X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						
PHI																
180.000	1.4910	1.1090	.5090	.2970	.4050	1.0430										
X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						

PHI

180.000

40.000

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98

(R80823)

AVES 97-707 1A9 OCA + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

70.000 -.0290 -.0170 .0180 .0830 .0170 -.0470 -.0670  
90.000 -.0370 -.0180 .0860 .0270 -.0180 -.0740 -.0550  
105.000 .0750 -.0390 .0750 -.0190 -.0960 -.0630 .0790  
110.000 .0160 -.0270 .1860 -.0110 -.2010 -.1210 -.0970 -.0610  
120.000 .7880 .3500 -.1350 -.1290 -.1390  
135.000 .0330 .0340 .3220 .5560 .1490 .0530 -.0040  
150.000 -.0110 .3720 .5880 .2030 .1020 -.1150  
165.000 .0080 .0240 .2920

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 8.060

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0070 .0108 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

1.4420 .9640 .4200 -.0730 .1400 -.0270  
20.000 .3480 -.1150 .0670 -.0630  
40.000 .2860 -.1150 .0850 .0050  
55.000 .2340 -.1470 .1430 .1270  
70.000 .1890 -.2010 -.1840 .1880  
90.000 .7500 .1880 -.2020 -.1570 .2720  
120.000 .2780 -.1740 .0080 .1720  
142.000 .4030 .1180 .2230 .5770  
150.000 .6200  
157.000 .4450  
162.000 .5750  
165.000 .8070  
169.000 .8070  
172.000 1.0070  
180.000 1.4420 1.0750 .4820 .2920 .4110 .9550

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

40.000 -.1680  
70.000 -.0290  
90.000 .0060 .0190 .0560 .0840 .0170 -.0470 -.0790  
105.000 .0010 -.0070 .1330 .0390 .0170 -.0680 -.0480  
110.000 .0810 -.0360 .0250 .0770 -.0590 .0290  
120.000 .1470 .0970 .1880 -.0820 -.2710 -.1440 -.1320 -.0920  
135.000 .7600 .3910 .1440 -.1790 -.2050  
150.000 -.0870 -.0820 .2210 .3260 .1330 .0200 -.0440

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98

(RB0823)

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

BETAT ( 6 ) = 8.560

MACH ( 1 ) = 1.555

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI .0000 .0360 .1120 .1320 .1230 .1230 .0470 -.1530

165.0000 -.0360 .3120 .4320 .4320 .1230 .0470 -.1530

180.0000 -.1190 -.0750 .2200 .2200 .1230 .0470 -.1530

BETAT ( 1 ) = -8.380

MACH ( 2 ) = 2.000

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB .16000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI .0000 1.5680 .9460 .4730 .0620 .0530 .1730 .1730 .0790 .0790 .0630 .0060 .0040 .0040 .0160

20.0000 .5390 .1510 .1460 .2090 .2090 .1120 .1120 .0940 .0940 .0760 .0440 .0220 .1280 .0950

40.0000 .6820 .1490 .3710 .2390 .2390 .3530 .3530 .3240 .3240 .2960 .0960 .0030 .0850 .1770

55.0000 .7430 .1980 .4640 .4520 .4520 .4420 .4420 .3540 .3540 .3470 .0680 .0350 .0640 .1540

70.0000 .7830 .2290 .3660 .4910 .4910 .5960 .5960 .3160 .3160 .0600 .0600 .0660 .0660 .0810

90.0000 1.3420 .2840 .3100 .5150 .5150 .8150 .8150 .1470 .1470 .0560 .0560 .0520 .0520 .0490

120.0000 .8140 .3470 .3840 .5590 .5590 .1050 .1050 .1470 .1470 .0560 .0560 .0520 .0520 .0490

142.0000 .7820 .3480 .4370 .8160 .8160 .1290 .1290 .0970 .0970 .1250 .0910 .0640 .0640 .0470

150.0000 .7820 .3480 .4370 .8160 .8160 .1290 .1290 .0970 .0970 .1250 .0910 .0640 .0640 .0470

157.0000 .7820 .3480 .4370 .8160 .8160 .1290 .1290 .0970 .0970 .1250 .0910 .0640 .0640 .0470

162.0000 .7820 .3480 .4370 .8160 .8160 .1290 .1290 .0970 .0970 .1250 .0910 .0640 .0640 .0470

165.0000 .7820 .3480 .4370 .8160 .8160 .1290 .1290 .0970 .0970 .1250 .0910 .0640 .0640 .0470

169.0000 .7820 .3480 .4370 .8160 .8160 .1290 .1290 .0970 .0970 .1250 .0910 .0640 .0640 .0470

172.0000 .7820 .3480 .4370 .8160 .8160 .1290 .1290 .0970 .0970 .1250 .0910 .0640 .0640 .0470

180.0000 1.5600 1.2190 .8020 .3480 .3860 .8490 .8490 .10640 .10640 .1210 .0360 .0070 .0070 .0310

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI .0000 .0230 .1000 .1000 .0650 .0650 .0650 .0650 .0650 .0650 .0650 .0650 .0650 .0650 .0650

40.0000 .0230 .1000 .1000 .0650 .0650 .0650 .0650 .0650 .0650 .0650 .0650 .0650 .0650 .0650

70.0000 .0720 .0650 .0650 .0650 .0650 .0650 .0650 .0650 .0650 .0650 .0650 .0650 .0650 .0650

90.0000 .0930 .0680 .0680 .0680 .0680 .0680 .0680 .0680 .0680 .0680 .0680 .0680 .0680 .0680

110.0000 .1050 .0740 .0740 .0740 .0740 .0740 .0740 .0740 .0740 .0740 .0740 .0740 .0740 .0740

120.0000 .0950 .0740 .0740 .0740 .0740 .0740 .0740 .0740 .0740 .0740 .0740 .0740 .0740 .0740

135.0000 .0700 .0710 .0710 .0710 .0710 .0710 .0710 .0710 .0710 .0710 .0710 .0710 .0710 .0710

150.0000 .0850 .0850 .0850 .0850 .0850 .0850 .0850 .0850 .0850 .0850 .0850 .0850 .0850 .0850

165.0000 -.1070 -.0060 .0370 .0370 .0370 .0370 .0370 .0370 .0370 .0370 .0370 .0370 .0370 .0370

180.0000 -.1070 -.0060 .0370 .0370 .0370 .0370 .0370 .0370 .0370 .0370 .0370 .0370 .0370 .0370

## TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 OCA + S3 + T9 ORBITER FUSELAGE (R80823)

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5600	.5075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PMI															
.000	1.5790	.9620	.4840	.0610	.0400	.1740	.0860		.0860		.0820	.0140	.0410	.0500	.0410
20.000			.5270	.1330	.0890	.2070	.1100		.1100		.0980			.0950	.0980
40.000			.6390	.1310	.2920	.2530	.1190		.1190		.0770	.0200	-.0120		
55.000			.6890	.1630	.3510	.4180	.3380		.3380		.2720				
70.000			.7170	.1760	.2820	.4600	.4410		.4410		.3190	.0580	-.0280	.0490	.1330
90.000		1.2870	.7320	.2330	.2470	.4940	.5760		.5760		.3120	.0430	.0740	.0250	.1150
120.000			.7690	.2960	.3430	.5070	.7190		.7190	.1390	.2900	.0370	.0400	.0440	.0500
142.000			.7690	.3350	.4190	.7730	1.0220		1.0220		.1240	.0290	.0200	.0430	.0310
150.000							1.2730		.9480						
157.000									.8450		-.0780	.0850	.0760	.0540	.0300
162.000															
163.000															
169.000															
172.000															
180.000	1.5790	1.2420	.6200	.3350	.3950	.7980	1.3300		1.0870		-.1200	.0680	.0170	-.0300	-.0370
X/LS	.5870	.6626	.7380	.7869	.8283	.8848	.9639		1.0015	1.0392					

PMI

.000	.0090														
40.000	.0800	.0440		.1150	.0480	-.0010	-.1440		-.1800						
70.000		.0560	.0450	.0480	.1490	.1190	.0920	.0740							
90.000		.0790	.0520	.1760	.1490	.1460	.0920	.0600							
105.000				.2760	.2320	.1460	.0660	.0350							
110.000															
120.000		.0880	.0740	.5170	.3150	.0980	.0740	.0740							
135.000			.5940	.4980	.0970	.0710	.1980								
150.000		.0710	.0770	.2640	.3500	.0370	.2480	.3000							
165.000		.0780		.2910	.5030	.3350	.3620	.1620							
180.000		-.0130	-.0130												

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PMI															
.000	1.6010	.9790	.5210	.0870	.0420	.1910	.1010		.1010		.1200	.0750	.0850	.0810	.0410
20.000			.5270	.1250	.0650	.2180	.1120		.1120		.1190				
40.000			.5120	.1250	.1960	.2630	.1260		.1260		.0980	.0340	-.0070	.1040	.0730
55.000			.6380	.1490	.2440	.3920	.3100		.3100		.2460				
70.000			.6570	.1480	.1960	.4280	.4150		.4150		.2940	.0350	-.0480	.0200	.1150
90.000		1.2320	.6670	.1740	.1880	.4430	.5400		.5400		.2850	.0250	-.0190	-.0070	.0990
120.000			.7130	.2720	.3060	.3550	.6390		.6390		.2690	.0150	.0200	.0140	.0380

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

(R08023)

BETAT ( 3 ) = -4.280

MACH ( 2 ) = 2.000

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0168 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

142.000 .7530 .3100 .4070 .7530 1.1910 .9670 .0880 .0100 .0000 .0440 .0250

150.000

157.000 .8970 .0410 .0700 .0470 .0250

162.000

165.000 .8480

169.000

172.000 1.0910 .0200 .0310 .0410

180.000

1.6010 1.2570 .6230 .3580 .4090 .7990 1.2650 .9639 1.0015 1.0392

X/LB

.5875 .6626 .7380 .7869 .8283 .8648 .9262

PHI

.0000 .0010 .0130 .0790 .0060 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

40.000

.0680 .0130 .0380 .1270 .0940 .0790 .0620 .0340 .0080

70.000

.0790 .0580 .1590 .1290 .1240 .0590 .0340 .0080

90.000

.115.000 .2380 .2000 .1230 .0390 .0080

110.000

.0960 .0830 .4410 .2590 .0740 .0530 .0560 .0560 .0560

120.000

.6330 .5030 .0730 .0810 .1850 .2620 .1250

135.000

.0920 .2880 .4120 .0750 .2440 .2620 .1250

150.000

.0840 .3050 .5320 .3430 .3350 .1250

165.000

.0360 .0410 .2180

180.000

BETAT ( 4 ) = -.170

MACH ( 2 ) = 2.000

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0168 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

.0000 1.6010 .9670 .4970 .0570 .0570 .1690 .1080 .0840 .1240 .1320 .0820 .0790 .0550 .0600

20.000

.4890 .0830 .0310 .2110 .2320 .2480 .2400 .2400 .2400 .2400 .2400 .2400 .2400 .2400 .2400

40.000

.5130 .0830 .1120 .2320 .3470 .3570 .3570 .3570 .3570 .3570 .3570 .3570 .3570 .3570 .3570

60.000

.5120 .0820 .1440 .3470 .3290 .4660 .4660 .4660 .4660 .4660 .4660 .4660 .4660 .4660 .4660

80.000

.5160 .0820 .0890 .2170 .2170 .3010 .3010 .3010 .3010 .3010 .3010 .3010 .3010 .3010 .3010

100.000

.5350 .1680 .2060 .2110 .2110 .8190 .8190 .8190 .8190 .8190 .8190 .8190 .8190 .8190 .8190

120.000

.6130 .2020 .2060 .2110 .2110 .7880 .7880 .7880 .7880 .7880 .7880 .7880 .7880 .7880 .7880

142.000

.6750 .2860 .3450 .6400 1.0800 1.0800 1.0800 1.0800 1.0800 1.0800 1.0800 1.0800 1.0800 1.0800

160.000

.1370 .0760 .0310 .0540 .0660 .0220 .0220 .0220 .0220 .0220 .0220 .0220 .0220 .0220 .0220

180.000

1.2950



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TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE

(RBC823)

MACH ( 2 ) = 2.000

BETAT ( 4 ) = -.170

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

180.000 1.6010 1.2750 .6300 .3660 .4010 .7840 1.0760 -.0570 -.0360 .0810 .0350

X/LB

.5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.000 .0180 .0410 -.0150 -.0370 -.0800 -.1040 -.1190 -.1240

40.000 .0350 .0670 .1310 .1570 .1190 .0760 -.0210

70.000 .0630 .0320 .1570 .1190 .0760 -.0210

90.000 .1050 .0780 .0610 .3020 .1180 -.0140 .0070 .0360

110.000 .1350 .0670 .6810 .4720 .0130 .0760 .1050

130.000 .1650 .0750 .3360 .5030 .1510 .1820 .1600

150.000 .1800 .0590 .3280 .5720 .3550 .2760 .0710

180.000 .0510 .0660 .0820

MACH ( 2 ) = 2.000

BETAT ( 5 ) = 3.930

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

.000 1.5780 .9860 .5360 .0920 .0260 .1970 .1090 .0970 .1520 .1580 .0720 .0840 .0280 .0180

20.000 .4790 .0640 .0360 .0360 .1560 .2300 .2010 .2010 .2010 .2010 .2010 .2010 .2010 .2010

40.000 .4550 .0640 .0640 .0640 .1940 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080

55.000 .4310 .0640 .0640 .0640 .1940 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080

70.000 .4040 .0640 .0640 .0640 .1940 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080

90.000 .3790 .0640 .0640 .0640 .1940 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080

120.000 .3590 .0640 .0640 .0640 .1940 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080

142.000 .3470 .0640 .0640 .0640 .1940 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080

150.000 .3470 .0640 .0640 .0640 .1940 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080

162.000 .3470 .0640 .0640 .0640 .1940 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080

169.000 .3470 .0640 .0640 .0640 .1940 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080

172.000 .3470 .0640 .0640 .0640 .1940 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080

180.000 .3470 .0640 .0640 .0640 .1940 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080 .3080

X/LB

1.5780 1.2520 .6090 .3580 .3970 .8080 1.2230

.3873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.000 .0020 .0030 -.0320 -.1270 -.1620 -.1680 -.2210 -.1720

40.000 .0020 .0030 -.0320 -.1270 -.1620 -.1680 -.2210 -.1720

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98

(R8C823)

AMES 97-707 1A9 OCA + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .3873 .6826 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
70.000 .0350 .0000 .0060 .0530 .0410 .0040 -.0180  
90.000 .0500 .0080 .0790 .0420 .0380 -.0180 -.0400  
105.000 .0380 .0020 .1020 .0360 .0380 -.0360 -.0440  
115.000 .0430 .0350 .2430 .0350 -.0950 -.0430 -.0110  
120.000 .0270 .0390 .7450 .4390 -.0440 -.0350 -.0400  
135.000 .0270 .0390 .2940 .6080 .1820 .1260 .0800  
150.000 .0270 .0390 .2730 .6420 .2670 .1780 .0170  
165.000 .0320 .0470 .1650

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0200 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI  
20.000 1.5800 .9620 .4980 .0770 .0190 .1820  
40.000 .4310 .0660 .0280 .1590  
60.000 .4010 .0650 .0250 .1230  
80.000 .3690 .0350 .0140 .1640  
100.000 .3450 .0040 .0290 .1400  
120.000 .3660 .0280 .0300 .0560  
140.000 .4650 .0990 .1010 .0730  
160.000 .5690 .2340 .2780 .5580  
180.000 .6140 .3610 .4020 .8220  
200.000 1.3800 1.2350 .6140 .3610 .4020 .8220 1.2230

X/LB .3873 .6826 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
40.000 .0060 .0350 .0060 .0350 .0310 .0310 .0330  
60.000 .0250 .0250 .0420 .0310 .0350 .0350 .0330  
80.000 .0380 .0380 .0690 .0370 .0380 .0350 .0310  
100.000 .0380 .0660 .0860 .0330 .0330 .0350 .0340  
120.000 .0300 .0240 .2190 .0030 .1550 .0840 .0500  
140.000 .0300 .7800 .4180 .0770 .0680 .0670 .0670  
160.000 .0350 .0420 .1170 .4610 .1750 .0980 .0520  
180.000 .0350 .0420 .1170 .4610 .1750 .0980 .0520

DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A98

(R80823)

AMES 97-707 1A9 OCA + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

165.000 -.0500 .2880 .4640 .1990 .1310 -.0110  
180.000 -.0110 -.0160 .1340

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

.000 1.5710 .9450 .4700 .0800 .0430 .1620 .0730 .0540 -.0040 -.0100 .0400  
20.000 .4030 .0550 .0050 .1190 .0030 .0030 .0030 .0740 .0110 .0030 -.0200 -.0390  
40.000 .3510 .0430 -.0200 .0730 .0240 .0240 .0240 .0900 .0180 .0180 .0440 .1120 .0530 .0580  
55.000 .3110 .0260 .0380 .1300 .1790 .1790 .1790 .1180 .0440 .1120 .0530 .0580 .0190  
70.000 .2830 .0050 .0650 .1310 .1780 .1780 .1780 .0280 .1160 .1120 .0630 .0190  
90.000 .8530 .2990 .0660 .0650 .0100 .0490 .1490 .1350 .2220 .1570 .0360 .0460  
120.000 .4070 .0610 .0660 .0360 .5600 .5600 .5600 .1490 .1560 .0000 .0580 .0790  
142.000 .5270 .2100 .2470 .4990 .8550 .8550 .8550 .1820 .1170 .0650 .1250 .1360  
150.000 .5270 .2100 .2470 .4990 .8550 .8550 .8550 .1820 .1170 .0650 .1250 .1360  
162.000 .5270 .2100 .2470 .4990 .8550 .8550 .8550 .1820 .1170 .0650 .1250 .1360  
165.000 .5270 .2100 .2470 .4990 .8550 .8550 .8550 .1820 .1170 .0650 .1250 .1360  
169.000 .5270 .2100 .2470 .4990 .8550 .8550 .8550 .1820 .1170 .0650 .1250 .1360  
172.000 .5270 .2100 .2470 .4990 .8550 .8550 .8550 .1820 .1170 .0650 .1250 .1360  
180.000 1.5710 1.2320 .5980 .3480 .3950 .8550 1.1560 1.0420 1.0015 1.0392

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.000 .0230 .0230 .0230 .0230 .0230 .0230 .0230 .0230 .0230 .0230 .0230 .0230 .0230 .0230  
40.000 -.0540 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170  
70.000 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170 .0170  
90.000 .0220 .0120 .0120 .0120 .0120 .0120 .0120 .0120 .0120 .0120 .0120 .0120 .0120 .0120  
105.000 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190  
110.000 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190  
120.000 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190  
135.000 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190  
150.000 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190  
165.000 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190  
180.000 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190 .0190

JAMES 97-777 1A9 02A + S3 + T9 ORBITER FUSELAGE (R0824) ( 24 MAY 73 )

## REFERENCE DATA

SREF =	2.4210 SQ.FT.	XWRP =	20.5300 INCHES
LREF =	39.6495 INCHES	YWRP =	.0000 INCHES
ZREF =	39.6495 INCHES	ZWRP =	.0000 INCHES
SCALE =	.1000 SCALE		

ALPHAT =  
RUDDER =  
RUCFLR =

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-4.000 ORBINC = .000
15.000 ELEVON = .000
.000

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### PARAMETRIC DATA

MACH ( 1 ) = 1.555      BETAT ( 1 ) = -8.330

SECTION ( 1 ) ORB: TER FUSELAGE  
DEPENDENT VARIABLE CP[illegible]

DATE 25 SEP 73

## TABULATED PRESSURE DATA - 1A98

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AMES 97-757 1A9 O2A + S3 + T9 ORBITER FUSELAGE

(RBO824)

MACH ( 1 ) = 1.555

BETAT ( 2 ) = -6.290

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
20.000	1.4250	.9920	.4490	-.1190	.0530	.0200			-.0130	-.0770	-.0770	-.0770	-.0770	.0390	-.0720
40.000			.5440	.0070	.0940	.0210			-.0240	-.0550	-.0550	-.0550	-.0550	.0390	-.0720
60.000			.6920	.1200	.2620	.0490			-.0770	-.0610	-.0610	-.0610	-.0610	.0390	-.0720
80.000			.7470	.1980	.3705	.2320			.1780	.1350	.1350	.1350	.1350	.0390	-.0720
94.000			.7360	.2310	.3700	.2840			.3110	.1330	.1330	.1330	.1330	.0390	-.0720
120.000	1.2030		.6790	.2240	.3740	.3200			.4140	.1110	.1110	.1110	.1110	.0390	-.0720
142.000			.6110	.2110	.3830	.5380			.5670	.0910	.0910	.0910	.0910	.0390	-.0720
150.000			.5550	.1700	.3620	.8580			.7650	-.0240	-.0240	-.0240	-.0240	.0390	-.0720
157.000							1.0200		.6830						
162.000									.5560						
169.000									.7820						
172.000							1.1760								
180.000	1.4250	.9780	.3930	.1780	.2890	.8440									
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

PHI

20.000	-.1440														
40.000	-.0310	.1450	.1100	.0860	-.0860	-.3070			-.1220						
60.000		-.0510	-.0250	-.0660	.0550	.0490	.0240		-.0140						
80.000		-.0210	.0090	.1190	.0570	.0380	-.0100	-.0330							
94.000			.1950	.1280	.0370	-.0440	-.0550								
120.000		-.0410	-.0180	.4540	.1820	-.0370	-.0450	-.0270	.0690						
135.000			.4760	.3560	-.0910	-.0280	.1440		.0570						
150.000		-.0780	-.0270	.2090	.2080	-.0420	.2010	.2010							
165.000		.0050	.2460	.4040	.2440	.2730	.0380								
180.000		-.1610	-.0280	.0810											

MACH ( 1 ) = 1.555

BETAT ( 3 ) = -4.240

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
20.000	1.4310	1.0160	.4690	-.1130	-.0140	.0260			.0330	-.0460	-.0460	-.0460	-.0460	.0320	-.0900
40.000			.5330	-.0210	.0270	.0330			.0150	-.0320	-.0320	-.0320	-.0320	.0320	-.0900
60.000			.6430	.1480	.1780	.0580			-.0520	-.0490	-.0490	-.0490	-.0490	.0320	-.0900
80.000			.6740	.1020	.2680	.2090			.1610	.1120	.1120	.1120	.1120	.0320	-.0900
94.000			.6550	.1550	.2670	.2580			.2910	.0940	.0940	.0940	.0940	.0320	-.0900
120.000	1.1410		.6010	.1560	.2750	.2930			.3860	.0810	.0810	.0810	.0810	.0320	-.0900
142.000			.5570	.1560	.3080	.5170			.5130	.0820	.0820	.0820	.0820	.0320	-.0900

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A99

AVES 97-707 1A9 C&amp;A + S3 + T9 ORBITER FUSELAGE

(R80824)

MACH ( 1 ) = 1.555

BETAT ( 3 ) = -4.240

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .1475 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

142.000 .5270 .1590 .3220 .8530 .7360  
 150.000 .5270 .1590 .3220 .8530 .7360  
 157.000 .5270 .1590 .3220 .8530 .7360  
 162.000 .5270 .1590 .3220 .8530 .7360  
 165.000 .5270 .1590 .3220 .8530 .7360  
 169.000 .5270 .1590 .3220 .8530 .7360  
 172.000 .5270 .1590 .3220 .8530 .7360  
 180.000 .5270 .1590 .3220 .8530 .7360

X/LB

PHI

120.000 .5270 .1590 .3220 .8530 .7360  
 125.000 .5270 .1590 .3220 .8530 .7360  
 130.000 .5270 .1590 .3220 .8530 .7360  
 135.000 .5270 .1590 .3220 .8530 .7360  
 140.000 .5270 .1590 .3220 .8530 .7360  
 145.000 .5270 .1590 .3220 .8530 .7360  
 150.000 .5270 .1590 .3220 .8530 .7360  
 155.000 .5270 .1590 .3220 .8530 .7360  
 160.000 .5270 .1590 .3220 .8530 .7360  
 165.000 .5270 .1590 .3220 .8530 .7360  
 170.000 .5270 .1590 .3220 .8530 .7360  
 175.000 .5270 .1590 .3220 .8530 .7360  
 180.000 .5270 .1590 .3220 .8530 .7360

MACH ( 1 ) = 1.555

BETAT ( 4 ) = -1.180

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .1475 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI

142.000 .5270 .1590 .3220 .8530 .7360  
 150.000 .5270 .1590 .3220 .8530 .7360  
 157.000 .5270 .1590 .3220 .8530 .7360  
 162.000 .5270 .1590 .3220 .8530 .7360  
 165.000 .5270 .1590 .3220 .8530 .7360  
 169.000 .5270 .1590 .3220 .8530 .7360  
 172.000 .5270 .1590 .3220 .8530 .7360

AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE (RB0024)

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.150

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3250	.3953	.5120
PHI															
180.000	1.4560	1.0050	.4070	.1880	.2880	.9980			.7920		-.2800	-.2220	-.0400	-.0720	-.0870

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
120.000	1.4560	1.0050	.4070	.1880	.2880	.9980			.7920	

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3250	.3953	.5120
PHI															
180.000	1.4560	1.0050	.4070	.1880	.2880	.9980			.7920		-.2800	-.2220	-.0400	-.0720	-.0870

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3250	.3953	.5120
PHI															
180.000	1.4560	1.0050	.4070	.1880	.2880	.9980			.7920		-.2800	-.2220	-.0400	-.0720	-.0870

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3250	.3953	.5120
PHI															
180.000	1.4560	1.0050	.4070	.1880	.2880	.9980			.7920		-.2800	-.2220	-.0400	-.0720	-.0870

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
120.000	1.4560	1.0050	.4070	.1880	.2880	.9980			.7920	

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3250	.3953	.5120
PHI															
180.000	1.4560	1.0050	.4070	.1880	.2880	.9980			.7920		-.2800	-.2220	-.0400	-.0720	-.0870

(R20824)

DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A3 C2A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP  
 X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI									
70.000	-.0680	-.0660	-.0420	.0190	-.0340	-.0750	-.0050		
90.000	-.0410	-.0530	.0370	-.0240	-.0590	-.1100	-.0880		
110.000		.0570	-.0250	-.0590	-.1380	-.0600			
130.000			.1740	-.0220	-.1500	-.0660	-.0140		
150.000			.7250	.3270	-.1440	-.1310	-.1420		
170.000			.2820	.4390	.0890	.0030	-.0430		
190.000			.3550	.5300	.1510	.0680	-.1360		
210.000			.1980						

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.980

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP  
 X/LB .0000 .0075 .0180 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3270 .3953 .5120

PHI														
20.000	1.4230	.9930	.4740	-.0830	.1130	.0160		-.0330	-.0740	-.0780	.0100	.0360	-.0980	
40.000		.4030	-.0850	-.0070	.0180			-.0090	-.0810	-.0530	-.0610	-.0870	-.1330	
60.000		.3620	-.0870	-.0300	.0280			.0290	.0270	-.0620				
80.000		.3170	-.1170	-.0710	.0100			.1570	.0200	-.2320	-.2950	-.1480	-.0980	
100.000		.2710	-.1690	-.1120	.1570			.2230	.0400	-.2480	-.2800	-.1440	-.1270	
120.000		.2240	-.1610	-.1050	.2210			.2520	-.0900	-.2810	-.2170	-.1710	-.1120	
140.000		.2010	-.0650	.0000	.3610			.2110	-.2920	-.2280	.0000	-.1170	-.1150	
160.000		.3480	.0590	.1660	.5940			.4710	-.2920	-.2280	.0000	-.1170	-.1150	
180.000								.6390	-.3530	-.2530	-.0770	-.1250	-.1530	
200.000								.4210	-.3530	-.2530	-.0770	-.1250	-.1530	
220.000								.5260						
240.000								.7510						

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP  
 X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI														
40.000	-.1570	.0110	-.0510	-.2030	-.2060	-.1950		-.1250	-.0870	-.1390				
60.000	-.1490	.0200	.0490	.1010	.1020	-.0520		-.0520	-.0520	-.0520				
80.000		.0400	.1150	.0560	.0050	-.0480		-.0480	-.0480	-.0480				
100.000		.0930	.0040	.0040	.0050	-.0780		-.0560	-.0560	-.0560				
120.000		-.0310	-.0460	.3010	.0030	-.1780		-.0640	-.0640	-.0640				
140.000		.7610	.3750	.3750	.3750	-.1170		-.1170	-.1170	-.1170				
160.000		-.0800	-.0710	.1470	.3420	.1440		.1440	.1440	.1440				







DATE 20 SEP 73

## TABULATED PRESSURE DATA - 1A98

(RBC824)

AMES 97-707 1A9 ORA + S3 + T9 ORBITER FUSELAGE

MACH (2) = 2.000

BETAT (2) = -6.270

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE																
X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120	
PHI																
142.000										.1390						
150.000									.9320		.0660	-.0140	.0000	-.0120	-.0210	
157.000						.5930		1.1320								
162.000									.8650		-.0100	.0410	.0250	-.0030	-.0210	
165.000									.7540							
169.000							1.1340				-.1530	-.0170	-.0370	-.0130	-.0890	
172.000									.9800							
180.000	1.4980	1.1180	.5110	.2610	.2840	.6870										
187.000	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392						

PHI

-0.0200

.0810

.0280

-.0090

.0310

.0350

.1990

.1840

.0740

.0740

.0650

.0310

.0490

.0270

.0340

.0260

.0810

.1550

.2800

.1070

.1200

.1090

.1660

-.1390

-.1820

MACH (2) = 2.000

BETAT (3) = -4.230

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER POSSESSOR																
X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120	
PHI																
.0000	1.5139	.9380	.5160	.0780	.0130	.1850			.0920		.0040	.0420	.0270	-.0360	.0130	
20.0000			.5230	.1420	.0570	.2100			.0990		.0060					
40.0000			.5920	.1420	.2060	.2460			.1150		.0630	.0200	-.0220	-.0070	.0380	
59.0000			.6120	.1600	.2560	.3370			.2630		.2000					
70.0000			.6210	.1600	.1920	.3600			.3200		.2570	.0090	-.0720	-.0270	.0440	
90.0000	1.1610		.6130	.1520	.1640	.3950			.4520		.2540	-.0020	-.0540	-.0430	.0140	
120.0000			.6340	.2260	.2300	.3350			.5930	.0750	.2000	-.0180	-.0260	-.0400	-.0180	
142.0000			.6240	.2370	.3020	.5940			.8720		.0450	-.0370	.0040	-.0140	-.0280	
190.0000							1.0550									
137.0000									.8170		-.0320	-.0010	.0100	-.0060	-.0240	
162.0000																
165.0000									.7570							
169.0000							1.0550									
172.0000																

1.0530

.7570

.0300

-.0240

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TABULATED PRESSURE DATA - 1A98

AMES 97-757 1A9 O2A + S3 + T9 ORBITER FUSELAGE

(R80824)

MACH ( 2 ) = 2.0000 BETAT ( 3 ) = -4.230

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.5130	1.1290	.5120	.2680	.3000	.6310			.9900		-.1560	-.1050	-.0340	-.0580	-.1680
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.0000	.0100							-.1570		.1280					
40.000	.0150	.0190		.0950	.0230	-.0120	-.1500			-.1260					
70.000	.0120	-.0020	-.0020	-.0200	.0560	.0280	.0150	.0080							
90.000	.0280	.0070	.0070	.0620	.0620	.0710	.0150	-.0120							
110.000			.1760	.1460	.0780	.0200	-.0330		.1020						
120.000	.0410	.0260	.3980	.2430	.0460	.0100	.0060	.0910							
135.000		.0320	.0360	.4840	.4300	-.0280	.0130	.0970							
150.000	.0290	.0360	.2140	.2930	.2930	-.0310	.1500	.1890							
180.000	-.0150	-.0150	.1570	.4020	.2520	.2490	.0690								

MACH ( 2 ) = 2.0000 BETAT ( 4 ) = -.160

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.0000	1.5150	.9320	.4810	.0690	.0200	.1880			.1390		.1780	.0630	.0350	-.0360	.0340
20.000			.4780	.1080	.0300	.2190			.1140		.1640				
40.000			.5020	.1080	.1270	.2250			.1130		.0830	.0620	.0170	.0220	.0010
55.000			.4960	.1070	.1540	.3130			.2790		.1630				
70.000			.4890	.0710	.0810	.2880			.2710		.2050	-.0200	-.0920	-.0460	.0230
90.000		1.0430	.4920	.0590	.0660	.1830			.4060		.1990	-.0320	-.0810	-.0590	.0130
120.000			.5350	.1470	.1450	.1700			.3090		.1650	-.0520	-.0490	-.0460	-.0100
142.000			.5730	.2000	.2510	.4920			.7350	-.0470	.0730	-.0860	.0000	-.0090	.0070
150.000								.9500							
157.000									.7110						
162.000											.1620	-.1170	.0640	.0680	.0150
165.000									.7370						
169.000															
172.000						1.1090									
180.000	1.5150	1.1450	.5170	.2670	.2960	.5930			.9770		.1380	-.1030	-.0760	.0340	-.0230
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.0000	.0300							-.1360		-.1020					
40.000	.0290	-.0010		-.0380	-.0840	-.0860	-.1880			-.1150					











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TABULATED PRESSURE DATA - 1A98

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AVES 97-757 1A9 02A + S3 + T9 ORBITER FUSELAGE

(RBC825)

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.273

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1596	.1901	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3750	1.0120	.4830	-.1030	.0420	.0020			-.0390		-.1030	-.1280	-.0480	-.0480	-.0620
20.000			.5710	.0280	.0980	.0070			-.0420		-.1030		.0720	.0070	.0240
40.000			.7110	.1870	.2780	.0430			-.0850		-.0720	-.1270	.0720	.0070	.0240
55.000			.7550	.2120	.3750	.1970			.1010		.1050				
70.000			.7320	.2540	.3550	.2380			.2220		.1090	-.1320	-.1870	.0120	.0160
90.000			.6500	.2200	.3490	.2720			.3610		.0930	-.1820	-.1740	-.0820	-.0280
120.000	1.1570		.5400	.1840	.3140	.3740			.5090		.0430	-.1800	-.1540	-.1400	-.0390
142.000			.4620	.0830	.2690	.7440			.7000		-.1160	-.1710	.0020	-.1410	-.0450
150.000							.9710								
157.000									.6190		-.2550	-.0960	-.1360	-.1290	-.0380
162.000									.4770						
165.000															
169.000							1.1000								
172.000															
180.000	1.3750	.8700	.2990	.0920	.1940	.6850			.6990		-.3670	-.2080	-.1890	-.2270	-.1310

MACH ( 1 ) = 1.555

BETAT ( 3 ) = -4.240

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1596	.1901	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3810	1.0320	.5090	-.1030	-.0530	.0310			.0180		.0770	-.1220	-.1330	.0240	-.0360
20.000			.5500	-.0110	.0230	.0210			.0080		.0740		.0660	-.0220	.0240
40.000			.6510	.0520	.2160	.0490			-.0750		-.0520	-.1230	.0660	-.0220	.0240
55.000			.6750	.1160	.2920	.1770			.0820		.0710	-.1510	-.2150	-.0380	-.0120
70.000			.6470	.1610	.2690	.2130			.2100		.0670	-.1870	-.1960	-.0780	-.0270
90.000	1.0930		.5720	.1350	.2440	.2440			.3370		.0350	-.1990	-.1810	-.1610	-.0400
120.000			.4910	.1180	.2510	.3970			.4580						

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TABULATED PRESSURE DATA - 1A98

(R0825)

AWES 97-757 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000	X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120					

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000	X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120					

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -1.30

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958

X/LB	PHI	142.000	150.000	157.000	162.000	165.000	169.000	172.000	180.000
.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958

(RBOB25)

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 02A + S3 + 19 ORBITER FUSELAGE

BETAT ( 4 ) = -.130

MACH ( 1 ) = 1.555

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .0075 .0100 .0339 .0602 .1355 .1506 .1561 .1732 .1956 .2259 .2711 .3200 .3953 .5120

.7190

-.3080 -.2610 -.0910 -.1170 -.1420

PMI 1.00.000 1.4040 .8960 .3130 .1030 .1950 .8920

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PMI .0000 -.0270 .0400 .0210 .0310 .1400 .3190

40.0000 -.1450 .0400 .0210 .0310 .1400 .3190

70.0000 -.1050 .0210 .0310 .1400 .3190

90.0000 -.0740 .0210 .0310 .1400 .3190

110.0000 -.0390 .0210 .0310 .1400 .3190

120.0000 -.0220 .0210 .0310 .1400 .3190

135.0000 -.0170 .0210 .0310 .1400 .3190

150.0000 -.0170 .0210 .0310 .1400 .3190

165.0000 -.0210 .0210 .0310 .1400 .3190

180.0000 .0210 .0310 .1400 .3190

BETAT ( 5 ) = 3.950

MACH ( 1 ) = 1.555

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .0075 .0100 .0339 .0602 .1355 .1506 .1561 .1732 .1956 .2259 .2711 .3200 .3953 .5120

.0230

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

.0390 .0310 .0880 .0120 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260 .0260

AMES 97-707 1A9 02A + S3 + 79 ORBITER FUSELAGE

(RB7825)

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.950

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6526 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PMI

70.000 -1.1400 -1.0980 -1.0890 -1.0280 -1.0310 -1.0300 -1.0560  
 90.000 -1.0700 -1.0700 -1.0650 -1.0550 -1.0780 -1.0280 -1.0520  
 110.000 .0470 -1.0290 -1.0740 -1.0710 -1.0460  
 120.000 -1.0280 -1.0520 -1.0790 -1.0300 -1.2040 -1.0790 -1.0650  
 135.000 .6470 .3140 -1.1540 -1.0710 -1.0410  
 150.000 -1.0180 -1.0280 .3070 .3520 -1.0350 -1.0640  
 165.000 -1.0670 .3150 .4820 .0950 .0180 -1.0620  
 180.000 -1.0860 -1.0790 .1320

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.995

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0612 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3270 .3953 .5121

PMI

.000 1.3740 1.0180 .4870 -1.0810 .1120 .0050  
 20.000 .4340 -1.0830 -0.0190 .0290  
 40.000 .3910 -1.0830 -1.0460 .0150  
 55.000 .3360 -1.0840 -1.0920 .0670  
 70.000 .2770 -1.1610 -1.1240 .1280  
 90.000 .7800 .2280 -1.1690 -1.1250 .1660  
 120.000 .2310 -1.1020 -1.0420 .3580  
 142.000 .2860 -1.0130 .1090 .5140  
 150.000 .6490  
 157.000 .3780  
 162.000 .4660  
 165.000 .6740  
 169.000 .6740  
 172.000 .9730  
 180.000 1.3740 .8980 .2990 .1030 .2120 .7210  
 190.000 .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PMI

.000 -1.1220  
 40.000 -1.1300  
 70.000 .1350  
 90.000 -1.0510 -1.0220 -1.0060 .0520 -1.0160 -1.110  
 110.000 -1.0540 .0290 .0950 .0110 -1.0230 -1.0890 -1.0000  
 120.000 .1210 .0360 -1.0260 -1.0900 -1.0080  
 135.000 .0340 .0720 .2520 .0370 -1.1780 -1.1150 -1.0910  
 150.000 .7570 .3760 -1.1180 -1.0940 -1.0000  
 160.000 -1.0110 -1.0540 .1990 .3100 .0950 .0090 -1.0280

DATE 20 SEP 73 TABULATED PRESSURE DATA - 1A99

AMES 97-707 1A9 ORA + S3 + T9 ORBITER FUSELAGE

(R00825)

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP  
X/LB .5875 .6826 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
165.0000 -.1080 .3000 .4830 .1400 .0540 -.1380  
180.0000 -.2020 -.0810 .1050

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.040

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP  
X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1516 .1581 .1732 .1958 .2259 .2711 .3270 .3953 .5120

PHI  
.0000 1.3510 .9970 .4760 -.0560 .1480 -.0380 -.1020  
20.0000 .4010 -.0850 .1080 -.0600 -.0920  
40.0000 .3300 -.0560 -.0710 -.0770  
55.0000 .2640 -.1240 -.1450 .0320  
70.0000 .1960 -.2130 -.1790 .1040  
90.0000 .7030 .1560 -.2160 -.1790 .1770  
120.0000 .1680 -.1410 -.1890 .2930  
142.0000 .2470 -.0340 .0660 .4110  
150.0000 .5910  
157.0000 .3570  
162.0000 -.3940 -.3130 -.1840 -.2130 -.1910  
165.0000 .4530  
169.0000 .9160  
172.0000 .6460  
180.0000 1.3510 .8820 .2900 .0930 .2190 .6460 .9262 .9639 1.0015 1.0392

X/LB .5875 .6826 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392  
PHI  
.0000 -.1260  
40.0000 .0340  
70.0000 -.0340  
90.0000 -.0160  
105.0000 .0110  
120.0000 .0110  
135.0000 .0140  
150.0000 -.0430  
165.0000 -.0930  
180.0000 -.1880  
PHI  
.0000 -.1190  
40.0000 -.1130  
70.0000 -.1120  
90.0000 -.1460  
105.0000 .0640  
120.0000 -.1340  
135.0000 -.1770  
150.0000 -.0990  
165.0000 -.1920  
180.0000 -.1920

(528034)

AMES 97-717 1A0 C/A + S3 + T9 CRDIER FUSELAGE

BETAT ( 1 ) = -8.29%

## SECTION ( : ) ORBITER FUSELAGE

DEPENDENT VARIABLE: CF

[illegible]

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2
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[illegible]
$$\text{WACH} (2) = 2.1200$$

### SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

[illegible]

AMES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE

(RBC0825)

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
142.000										.1250					
150.000									.8340		.0000	-.0500	.0000	-.0630	-.0680
157.000								.9980							
162.000									.7810						
165.000									.6620		-.1180	.0000	-.0200	-.0530	-.0620
169.000															
172.000								.9120							
180.000									.8720		-.1830	-.1420	-.0870	-.1770	-.0810

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

## PHI

.0000	-.0720														
40.000	.0660														
70.000	-.0310	-.0530	.1510	.1170	.0590	-.0640									
90.000	-.0080	-.0400	.0640	.0730	.0570	.0100	-.0180								
115.000			.1650	.1680	.0580	-.0370	-.0370								
110.000								.1160							
125.000	-.0200	-.0330	.4450	.2640	.0380	-.0140	-.0140	.0210							
135.000			.3360	.3280	-.0530	-.0580	-.0250								
150.000	-.0260	-.0170	.1020	.1420	-.0990	.0650	.1610								
165.000	-.0180	.1390	.1390	.2640	.1750	.2180	.0580								
180.000	-.0800	-.0980													

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.0000	1.4190	.9220	.5130	.0980	.0200	.1990			.0990		.1020	.0250	-.0180	-.0820	-.0810
20.000			.5270	.1580	.0710	.2140			.0910		.0760				
40.000			.5820	.1560	.2250	.2340			.1030		.0200	.0070	-.0250	-.0450	.0410
55.000			.5950	.1640	.2520	.3050			.2250		.1520				
70.000			.5990	.1630	.1740	.3220			.2620		.2100	-.0150	-.0960	-.0600	-.0120
90.000	1.0980		.5790	.1300	.1430	.3420			.3620		.2210	-.0290	-.0830	-.0780	-.0420
120.000			.5650	.1740	.1680	.3340			.5190		.1660	-.0520	-.0700	-.0850	-.0630
142.000										.0660					
150.000			.5370	.1670	.2150	.4070			.7930		-.0040	-.0690	.0000	-.0650	-.0670
157.000								.9460							
162.000									.7380						
165.000															
169.000															
172.000															

.8830

(RECEIVED)

JAMES 97-717 1A9 Q2A + S3 + T9 CRBY TER FUSELAGE

WACH ( 2 ) = 2.0000  
BETAY ( 3 ) = -4.2100

## DEPENDENT VARIABLE CP

## SECTION 1: ORBITER FUSELAGE

[illegible]

MACH ( 2 ) = 2.000  
BETAT ( 4 ) = -.140

## DEPENDENT VARIABLE CF

## SECTION (1) ORBITER FUSELAGE

[illegible]



DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A9B

(R00825)

ANES 97-757 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -1.140

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP	
X/LB			
PHI			
70.000	-.0540	-.0670	-.0640
90.000	-.0260	-.0310	-.0110
105.000		.0710	.0420
110.000			.0120
120.000	-.0090	-.0210	.2120
135.000			.4360
150.000	-.0300	-.0130	.1850
165.000	-.0350	.1920	.3630
180.000	-.0370	-.0280	.0330

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP	
X/LB			
PHI			
20.000	1.4160	.9110	.5370
40.000		.4820	.1170
60.000		.4510	.1160
80.000		.3970	.1150
100.000		.3540	.0180
120.000	.8490	.3330	-.0350
140.000		.3660	.0360
160.000		.4120	.0990
180.000			.4120
PHI			
20.000		.4820	.1170
40.000		.4510	.1160
60.000		.3970	.1150
80.000		.3540	.0180
100.000		.3330	-.0350
120.000	.8490	.3660	.0360
140.000		.4120	.0990
160.000			.4120

SECTION ( 1 ) ORBITER FUSELAGE		DEPENDENT VARIABLE CP	
X/LB			
PHI			
20.000	1.4160	.9110	.5370
40.000		.4820	.1170
60.000		.4510	.1160
80.000		.3970	.1150
100.000		.3540	.0180
120.000	.8490	.3330	-.0350
140.000		.3660	.0360
160.000		.4120	.0990
180.000			.4120





AMES 97-7J7 1A9 C2A + S3 + T9 GRBI TER FUSELAGE

(RB-2826)

MACH ( 1 ) = 1.555      BETAT ( 2 ) = -6.260

SECTION ( 1 ) ORBITER FUSELAGE

X\LB	X\LB	.0186	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI														
.000	1.3120	1.0680	.5540	-.0820	-.0390	.0020								
.20.000			.6480	.0620	.0400	.0020								
.40.000			.7580	.1830	.2610	.0220								
.55.000			.7840	.2670	.3550	.1520								
.70.000			.7340	.2990	.3180	.1840								
.90.000			.6260	.2030	.3150	.2090								
1.20.000	1.1230		.4720	.1440	.2400									
1.42.000														
1.50.000			.3690	.0160	.1880	.6230								
1.57.000							.9020							
1.62.000														
1.65.000														
1.69.000														
1.72.000														
1.80.000	1.3120	.7600	.2050	.0150	.1070	.5770								
PHI														
.000														
.20.000														
.40.000														
.55.000														
.70.000														
.90.000														
1.20.000														
1.42.000														
1.50.000														
1.57.000														
1.62.000														
1.65.000														
1.69.000														
1.72.000														
1.80.000	1.3120	.7600	.2050	.0150	.1070	.5770								
PHI														
.000														
.20.000														
.40.000														
.55.000														
.70.000														
.90.000														
1.20.000														
1.42.000														
1.50.000														
1.57.000														
1.62.000														
1.65.000														
1.69.000														
1.72.000														
1.80.000	1.3120	.7600	.2050	.0150	.1070	.5770								

## III

[illegible]

**WACH ( 1 ) = 1.555**  
**BETAT ( 3 ) = -4.220**

SECTION (1) ORBITER FUSELAGE

M/LB	.0000	.0075	.0169	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PMI															
.0000	1.3270	1.2440	.5340	-.1450	-.1790	.0320		.0310		-.0530	-.1140	-.1360	-.0460	.0260	
20.000			.6690	-.0160	-.0790	.0100		-.0350		.0120					
40.000			.7550	.0660	.1890	.0170		-.1010		.0370	-.0710	.0230	-.0100	.0600	
50.000			.7070	.1530	.2710	.1200		.0310		.1270					
70.000			.6490	.1950	.2370	.1520		.0970		.0550	-.1230	-.1750	-.0750	-.0510	
90.000			.5450	.1220	.2450	.1790		.2790		.0520	-.1860	-.1860	-.1130	-.0780	
120.000		1.0320	.4450	.0220	.2030	.2290		.4250		-.0150	-.2190	-.2150	-.1100	-.1100	
			.4190	.0190	.2030	.2290		.4250							

AMES 97-757 1A9 C2A + S3 + T9 ORBITER FUSELAGE (REQB26)

**WACH ( 1 ) = 1.555**  
**BETAT ( 3 ) = -4.220**

SECTION ( 1 ) ORBITER FUSELAGE

NAME	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427
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**WACH ( 1 ) = 1.555**  
**BETAT ( 4 ) = -.120**

## DEPENDENT VARIABLE CP

[illegible]





TO VERY FIRST AGE (RECEIVED)

WACH ( ) = 1.555  
BETAT ( S ) = 6.010

SECTION: 1100BATTER FUSELAGE

DEPENDENT VARIABLE CP

[illegible]

165.120	-0.080	.328	.410	.1180	.0670	-.1330
166.120	-0.080	.328	.410	.1180	.0670	-.1330
167.120	-0.080	.328	.410	.1180	.0670	-.1330
168.120	-0.080	.328	.410	.1180	.0670	-.1330
169.120	-0.080	.328	.410	.1180	.0670	-.1330
170.120	-0.080	.328	.410	.1180	.0670	-.1330
171.120	-0.080	.328	.410	.1180	.0670	-.1330
172.120	-0.080	.328	.410	.1180	.0670	-.1330
173.120	-0.080	.328	.410	.1180	.0670	-.1330
174.120	-0.080	.328	.410	.1180	.0670	-.1330
175.120	-0.080	.328	.410	.1180	.0670	-.1330
176.120	-0.080	.328	.410	.1180	.0670	-.1330
177.120	-0.080	.328	.410	.1180	.0670	-.1330
178.120	-0.080	.328	.410	.1180	.0670	-.1330
179.120	-0.080	.328	.410	.1180	.0670	-.1330
180.120	-0.080	.328	.410	.1180	.0670	-.1330
181.120	-0.080	.328	.410	.1180	.0670	-.1330
182.120	-0.080	.328	.410	.1180	.0670	-.1330
183.120	-0.080	.328	.410	.1180	.0670	-.1330
184.120	-0.080	.328	.410	.1180	.0670	-.1330
185.120	-0.080	.328	.410	.1180	.0670	-.1330
186.120	-0.080	.328	.410	.1180	.0670	-.1330
187.120	-0.080	.328	.410	.1180	.0670	-.1330
188.120	-0.080	.328	.410	.1180	.0670	-.1330
189.120	-0.080	.328	.410	.1180	.0670	-.1330
190.120	-0.080	.328	.410	.1180	.0670	-.1330
191.120	-0.080	.328	.410	.1180	.0670	-.1330
192.120	-0.080	.328	.410	.1180	.0670	-.1330
193.120	-0.080	.328	.410	.1180	.0670	-.1330
194.120	-0.080	.328	.410	.1180	.0670	-.1330
195.120	-0.080	.328	.410	.1180	.0670	-.1330
196.120	-0.080	.328	.410	.1180	.0670	-.1330
197.120	-0.080	.328	.410	.1180	.0670	-.1330
198.120	-0.080	.328	.410	.1180	.0670	-.1330
199.120	-0.080	.328	.410	.1180	.0670	-.1330
200.120	-0.080	.328	.410	.1180	.0670	-.1330

WACH ( 1 ) = 1.555  
BETAT ( 7 ) = 9.050

SECTION / 1106B'ITE FINISAGE

X/LB	.6875	.9188	.9339	.9612	.9355	.9516	.9581	.9732	.9958	.2259	.2711	.3293	.3953	.5121
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PMI	1.3130	1.0490	.5260	-.0840	.0030	-.0290	-.0530	-.1330	-.0930	-.1080	-.1040
20.000			.4300	-.1070	-.1020	-.0360	-.1240	-.1690	-.1050	-.0720	-.1390
40.000			.3550	-.1240	-.1570	-.0570	-.1490	-.1690	-.1050	-.0720	-.1390
55.000			.2810	-.1370	-.1810	-.0130	-.1090	-.1690	-.1050	-.0720	-.1390
70.000			.1980	-.1540	-.2050	.0870	-.0390	-.2760	-.3430	-.2160	-.0240
90.000		.6860	.1340	-.1360	-.1950	.1230	-.1750	-.3040	-.3330	-.2350	-.1460
120.000			.1130	-.1780	-.1310	.2730	-.0970	-.3240	-.3000	-.2390	-.10190
142.000			.1540	-.1070	-.0130	.3590	-.3430	-.3070	-.1070	-.1830	-.1060
150.000							.5660				
157.000							.2970				
162.000								-.4220	-.3390	-.2110	-.2130
165.000							.3770				
169.000											
172.000		.7660	.1920	.0020	.1150	.5340	.5580	-.3920	-.3010	-.2870	-.2130
200.000	1.3130						.8190				

[illegible]

-.0310  
-.1480



AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

(R00026)

MACH (2) = 2.000 BETAT (1) = -6.280

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1906	.1981	.1732	.1958	.2259	.2711	.3870	.3953	.5120
PHI															
.0000	1.3020	.9930	.6060	.1240	.0200	.1350			.0390		-.0230	-.0300	-.0680	-.0570	.0220
20.0000		.6520	.2440	.1420	.1150				.0420		-.0270				
40.0000		.7450	.2890	.4120	.1450				.0490		-.0110	-.0550	-.0500	.1390	.1150
55.0000		.7590	.3300	.5090	.3000				.2250		.1330				
70.0000		.7440	.3080	.4290	.3560				.2090		.0130	-.0680	-.0250	.0670	.0670
90.0000	1.1560	.6780	.2180	.2820	.3500				.2820		.2420	-.0200	-.0720	-.0500	.0250
120.0000		.5760	.1910	.2260	.3350				.5980		.1380	-.0510	-.0970	-.0680	-.0570
142.0000									.1610						
150.0000		.4800	.1280	.1630	.4460				.7470		-.0670	-.0560	.0220	-.0680	-.0570
157.0000								.8980							
162.0000									.7120		-.0790	-.0130	-.0480	-.0780	-.0690
165.0000									.5310						
169.0000															
172.0000					.6670										
180.0000	1.3020	.8400	.3070	.1070	.1100	.5000			.7100		-.2050	-.1650	-.2460	-.2350	-.1290
X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

## PHI

.0000	-.0540														
40.0000	.1220	.0820	.2780	.2060	.1670	-.0470			-.0940						
70.0000		-.0540	-.0750	-.0700	.0120	-.0150			-.0310						
90.0000		-.0180	-.0500	-.0450	.0090	.0160			-.0400						
105.0000			.1520	.2030	.0580	-.0040			-.0490						
110.0000															
120.0000		-.0750	-.0950	.5380	.2820	.0470	-.0280		-.0240						
135.0000			.1620	.1450	-.1400	-.1520	-.1370								
150.0000		-.0700	-.0670	.0350	.0040	-.1680	-.1660		-.0540						
165.0000		-.0390	.0660	.1170	.0520	.1040	.0120								
180.0000		-.1690	-.1620	-.0250											

MACH (2) = 2.000 BETAT (2) = -6.230

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1906	.1981	.1732	.1958	.2259	.2711	.3870	.3953	.5120
PHI															
.0000	1.3280	.9980	.6270	.1220	-.0020	.1750			.0710		.0560	-.0080	-.0720	-.0670	-.0330
20.0000		.6500	.2160	.1020	.1580				.0680		-.0080				
40.0000		.7020	.2160	.3550	.1530				.0550		-.0090	-.0500	-.0280	.0430	.0710
55.0000		.6930	.2580	.4440	.2760				.1880		.0030				
70.0000		.6700	.2500	.3730	.2940				.2170		.1810	-.0190	-.0900	-.0580	.0160
90.0000	1.1050	.6090	.1630	.2010	.3070				.2520		.2110	-.0410	-.0630	-.0790	-.0160
120.0000		.5220	.1670	.1870	.3000				.5450		.0230	-.0160	-.1140	-.0100	-.0390

[illegible]



(P00226)

AVES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.1000 BETAT ( 4 ) = -.120

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

70.0000 -0.0960 -0.1040 -0.1070 -0.0560 -0.0640 -0.0870 -0.0960  
 80.0000 -0.0810 -0.0790 -0.0850 -0.0270 -0.0300 -0.0840 -0.1070  
 90.0000 -0.0520 -0.0230 -0.0390 -0.0890 -0.1170  
 100.0000 -0.0330 -0.0430 -0.1330 -0.0870 -0.0600 -0.0830 -0.0690  
 110.0000 -0.0300 -0.0380 -0.0360 -0.1490 -0.1910 -0.1600 -0.1150  
 120.0000 -0.0480 -0.0680 -0.1600 -0.2150 -0.1260 -0.0780 -0.0570  
 130.0000 -0.0680 -0.0210 -0.0520

MACH ( 2 ) = 2.0000 BETAT ( 5 ) = 3.950

## SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2771 .3200 .3953 .5120

PHI

.0000 1.3190 .9580 .6100 .1230 .0120 .2130  
 20.0000 .0590 .1520 .0220 .2330  
 40.0000 .0080 .1480 .0430 .2260  
 55.0000 .4320 .1490 .0660 .1290  
 70.0000 .3610 -0.0020 .0240 .0600  
 90.0000 .7940 .3080 -0.0430 -0.0140 .0550  
 120.0000 .2960 -0.0090 -0.0100 .0090  
 142.0000 .3170 .0310 .0620 .2070  
 153.0000  
 157.0000 .5730  
 162.0000 .4980  
 165.0000 .5560  
 169.0000  
 172.0000 .7310  
 180.0000 1.3190 .8840 .3080 .0950 .1220 .3900

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.0000 .0900  
 40.0000 .0390  
 70.0000 .0610  
 90.0000 -0.0860  
 100.0000 -0.0610  
 110.0000 .0040  
 120.0000 -0.0490  
 130.0000 .4720  
 140.0000 -0.0720  
 150.0000 .0070  
 160.0000 .0070  
 170.0000 .0070  
 180.0000 .0070  
 190.0000 .0070  
 200.0000 .0070  
 210.0000 .0070  
 220.0000 .0070  
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 990.0000 .0070  
 1000.0000 .0070

(RDC026)

## TABULATED PRESSURE DATA - 1A98

DATE 20 SEP 73

AMES 97-707 1A9 C2A + S3 + T9 ORBITER FUSELAGE

MACH (2) = 2.000 BETAT (5) = 3.950

MACH (2) = 2.000

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .5873 .5626 .7380 .7869 .8283 .8849 .9262 .9639 1.0015 1.0392

PHI .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

165.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

180.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

MACH (2) = 2.000 BETAT (6) = 5.990

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

PHI .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

20.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

40.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

55.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

70.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

90.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

120.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

142.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

150.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

157.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

162.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

165.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

169.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

172.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

180.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

X/LB .5873 .6626 .7380 .7869 .8283 .8849 .9262 .9639 1.0015 1.0392

PHI

.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

40.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

70.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

90.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

105.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

110.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

120.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

135.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

150.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

165.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

180.0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000 .0000

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.000

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3210 .3953 .5120

FHI

.000 1.3110 .9890 .5730 .1090 .0080 .1330 .0430 .0360 .0360 .0360 .0360 .0360 .0360  
 20.000 .5300 .0900 .0610 .1490 .0430 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360  
 40.000 .4450 .0880 .0750 .0880 .0430 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360  
 55.000 .3550 .0730 .0600 .0450 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360  
 70.000 .2690 .0790 .0770 .0140 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360  
 90.000 .7000 .2060 .1070 .0820 .0140 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360  
 120.000 .2040 .0670 .0620 .0140 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360  
 142.000 .2520 .0040 .0240 .1720 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360  
 150.000 .5980 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360  
 157.000 .4440 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360  
 162.000 .5150 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360  
 169.000 .7020 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360  
 172.000 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360 .0360  
 180.000 1.3110 .8960 .2910 .0780 .1130 .4510 .6820 .6820 .6820 .6820 .6820 .6820 .6820

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

FHI

.000 -.0430 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000  
 40.000 -.0530 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000  
 70.000 -.0940 .1180 .1250 .1250 .1250 .1250 .1250 .1250 .1250 .1250 .1250 .1250 .1250  
 90.000 .0740 .0960 .0430 .0770 .0790 .1150 .1250 .1250 .1250 .1250 .1250 .1250 .1250  
 105.000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000  
 110.000 .0780 .0660 .1490 .0160 .1470 .1370 .1160 .1160 .1160 .1160 .1160 .1160 .1160  
 120.000 .1270 .1540 .0770 .0260 .1070 .1110 .1110 .1110 .1110 .1110 .1110 .1110 .1110  
 135.000 .1470 .1470 .0370 .2010 .0080 .0670 .0670 .0670 .0670 .0670 .0670 .0670 .0670  
 150.000 .1790 .1720 .0960 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000  
 165.000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000  
 180.000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000 .000

(R0827) (26 MAY 73)

## REFERENCE DATA

SREF =	2.4210 SQ.FT.	MRP =	20.5300 INCHES
LRFF =	39.8490 INCHES	YMRP =	.0000 INCHES
BRFF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.0300 SCALE		

WICH ( 1 ) = 1.555  
BETAT ( 1 ) = -8.330

## SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0168	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3993	.5120
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PMI	1.2520	1.1990	.5500	-.1100	-.1300	-.0160	-.1180	-.0210	-.1460	-.0750	-.0710	.0760
.000							-.1260	-.0130				
20.000			.7680	.0900	-.0220	-.0780	-.1400	-.0320	-.0870	.0400	.0690	.0760
40.000			.9680	.2270	.2850	-.0450	.0650	.1880				
55.000			.9040	.3720	.3960	.1500	.1150	.2050	-.0650	-.1270	.0140	.0160
70.000			.8060	.4250	.3310	.1850	.2100	.1180	-.1130	-.1590	-.0380	-.0320
90.000	1.1230		.6700	.2820	.3380	.2070	.4990	.1430	-.1930	-.2110	-.1510	-.1320
120.000			.4690	.1640	.2650	.2100	.0110			.0000	-.1820	-.1230
150.000			.3350	-.0730	.1750	.5220	.5870	-.2370	-.2110			
157.000							.8420					
162.000							.5240					
165.000							.3390					
169.000												
172.000												
180.000	1.2520	.6690	.1470	-.0400	.0720	.4460	.5330	-.4050	-.3250	-.4110	-.3550	-.2060
181.000							.8020					
187.000	.5973	.6626	.7380	.7869	.8283	.8848	.9639	1.0015	1.0392			
191.000							.9262					

[illegible]







AMES 97-717 1A9 C2A + S3 + T9 CREITER FUSELAGE

(1234567)

MACM ( 1 ) = 1.555  
 BETAT ( 4 ) = -.115

SECTION / 1108B178 FLUCELAGE

[illegible]

	-1665
D47	-1785
D47	-1475
	-3925
	-3555

	0630	0715	0800	0845	0930	1015	1100	1145	1230	1315	1400	1445	1530	1615	1700	1745	1830	1915	2000	2045	2130	2215	2300	2345	2430	2515	2600	2645	2730	2815	2900	2945	3030	3115	3200	3245	3330	3415	3500	3545	3630	3715	3800	3845	3930	4015	4100	4145	4230	4315	4400	4445	4530	4615	4700	4745	4830	4915	5000	5045	5130	5215	5300	5345	5430	5515	5600	5645	5730	5815	5900	5945	6030	6115	6200	6245	6330	6415	6500	6545	6630	6715	6800	6845	6930	7015	7100	7145	7230	7315	7400	7445	7530	7615	7700	7745	7830	7915	8000	8045	8130	8215	8300	8345	8430	8515	8600	8645	8730	8815	8900	8945	9030	9115	9200	9245	9330	9415	9500	9545	9630	9715	9800	9845	9930	10015	10100	10145	10230	10315	10400	10445	10530	10615	10700	10745	10830	10915	11000	11045	11130	11215	11300	11345	11430	11515	11600	11645	11730	11815	11900	11945	12030	12115	12200	12245	12330	12415	12500	12545	12630	12715	12800	12845	12930	13015	13100	13145	13230	13315	13400	13445	13530	13615	13700	13745	13830	13915	14000	14045	14130	14215	14300	14345	14430	14515	14600	14645	14730	14815	14900	14945	15030	15115	15200	15245	15330	15415	15500	15545	15630	15715	15800	15845	15930	16015	16100	16145	16230	16315	16400	16445	16530	16615	16700	16745	16830	16915	17000	17045	17130	17215	17300	17345	17430	17515	17600	17645	17730	17815	17900	17945	18030	18115	18200	18245	18330	18415	18500	18545	18630	18715	18800	18845	18930	19015	19100	19145	19230	19315	19400	19445	19530	19615	19700	19745	19830	19915	20000	20045	20130	20215	20300	20345	20430	20515	20600	20645	20730	20815	20900	20945	21030	21115	21200	21245	21330	21415	21500	21545	21630	21715	21800	21845	21930	22015	22100	22145	22230	22315	22400	22445	22530	22615	22700	22745	22830	22915	23000	23045	23130	23215	23300	23345	23430	23515	23600	23645	23730	23815	23900	23945	24030	24115	24200	24245	24330	24415	24500	24545	24630	24715	24800	24845	24930	25015	25100	25145	25230	25315	25400	25445	25530	25615	25700	25745	25830	25915	26000	26045	26130	26215	26300	26345	26430	26515	26600	26645	26730	26815	26900	26945	27030	27115	27200	27245	27330	27415	27500	27545	27630	27715	27800	27845	27930	28015	28100	28145	28230	28315	28400	28445	28530	28615	28700	28745	28830	28915	29000	29045	29130	29215	29300	29345	29430	29515	29600	29645	29730	29815	29900	29945	30030	30115	30200	30245	30330	30415	30500	30545	30630	30715	30800	30845	30930	31015	31100	31145	31230	31315	31400	31445	31530	31615	31700	31745	31830	31915	32000	32045	321
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FBI

	0825'	0830'
0925'		
0930'		
(0930) - 0935'		

[illegible][illegible]

	- .968	- .968	- .171	- .189
	- .999	- .999	- .968	- .189
	- .999	- .999	- .968	- .189

	93.587	.0295	- .1870	- .2165
		.0820		

105.000  
- 1590

	- .0579	.1681	-.1591	-.1661	-.1431	-.1941
110.000						

[illegible]

	135.9270	.3370	.2170	- .1240	- .0560
		.3370	.2170	.2700	- .0560

$$\text{BETAT}(5) = 3.997$$

DEPENDENT VARIABLE C<sub>P</sub>

	.79	.86	.93	.98	1.00
SECTION V - FORTUNE TELLERS					
	.1732	.1958	.2259	.2711	.3270
					.3953 .5120

EHI	-0.0797	--1210	--1640
EHI	0.0860	--0170	--0660

[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]

025C.  
157.000

105.500  
0.66  
39.0

Year	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100																																																																																																								
1950	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84	1.85	1.86	1.87	1.88	1.89	1.90	1.91	1.92	1.93	1.94	1.95	1.96	1.97	1.98	1.99	2.00	2.01	2.02	2.03	2.04	2.05	2.06	2.07	2.08	2.09	2.10	2.11	2.12	2.13	2.14	2.15	2.16	2.17	2.18	2.19	2.20	2.21	2.22	2.23	2.24	2.25	2.26	2.27	2.28	2.29	2.30	2.31	2.32	2.33	2.34	2.35	2.36	2.37	2.38	2.39	2.40	2.41	2.42	2.43	2.44	2.45	2.46	2.47	2.48	2.49	2.50	2.51	2.52	2.53	2.54	2.55	2.56	2.57	2.58	2.59	2.60	2.61	2.62	2.63	2.64	2.65	2.66	2.67	2.68	2.69	2.70	2.71	2.72	2.73	2.74	2.75	2.76	2.77	2.78	2.79	2.80	2.81	2.82	2.83	2.84	2.85	2.86	2.87	2.88	2.89	2.90	2.91	2.92	2.93	2.94	2.95	2.96	2.97	2.98	2.99	3.00	3.01	3.02	3.03	3.04	3.05	3.06	3.07	3.08	3.09	3.10	3.11	3.12	3.13	3.14	3.15	3.16	3.17	3.18	3.19	3.20	3.21	3.22	3.23	3.24	3.25	3.26	3.27	3.28	3.29	3.30	3.31	3.32	3.33	3.34	3.35	3.36	3.37	3.38	3.39	3.40	3.41	3.42	3.43	3.44	3.45	3.46	3.47	3.48	3.49	3.50	3.51	3.52	3.53	3.54	3.55	3.56	3.57	3.58	3.59	3.60	3.61	3.62	3.63	3.64	3.65	3.66	3.67	3.68	3.69	3.70	3.71	3.72	3.73	3.74	3.75	3.76	3.77	3.78	3.79	3.80	3.81	3.82	3.83	3.84	3

	x/LB	.5873	.6626	.7380	.7869	.8283	.8648	.8962	.9262	.9502	.9662
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STABILATED PRESSURE DATA - 1A-5

DATE 21 SEP 73

AMES 97-707 1A9 02A + 53 + 19 0002 1000

$$\text{BETAT} ( 5 ) = 3.992$$

ACH (1) = 1.000

SECTION (1) ORBITER FUSELAGE

5. **Y/LB**

[illegible]

BETAT ( 6 ) = 6.030

$\text{MACH } (1) = 1.555$

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

**8/28**

PMI	1.3130	1.0990	.5770	-.0950	-.0730	.0080	-.0110	-.1170	-.1630	-.1230	-.0210	-.0190
.000			.5150	-.0950	-.1170	.0220	-.0520	-.1530	-.1630			
25.000			.4630	-.0950	-.1360	.0240		-.0410				
40.000			.3790	-.0810	-.1470	.0180	-.0170	-.0230	-.2670	-.3290	-.2730	-.0800
55.000			.2860	-.1230	-.1560	.0830	.1180	-.0520	-.2910	-.3270	-.2440	-.0810
70.000			.2010	-.1870	-.1400	.1170	.2100	-.1270	-.3180	-.3080	-.2340	-.0940
90.000	.7430		.1460	-.1580	-.0970	.2510	.1320					
120.000			.1530	-.1150	-.0200	.4460	.3940	-.3380	-.3050	.0770	-.1940	-.1550
142.000							.6310					
150.000							.3060	-.4140	-.3270	-.1890	-.1920	-.2870
157.000												
162.000							.3700					
165.000							.8360					
169.000			.1540	-.0270	.0730	.5450	.5540	-.3910	-.2730	-.2690	-.3020	-.2360
172.000		.7920										
180.000	1.3130						1.0015					

**x/x**

**PMI**

**CCNY**

72.325

02/07/16

01/07/16

205-5178

990-8000

**2000**

120.000

60101-566

235-1111

251-225

## CONCLUSIONS

\_\_\_\_\_

1

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A9B

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

(RBC827)

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.030  
SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7969 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
165.000 -0.0390 .3130 .4070 .0910 .0400 -.1460  
180.000 -.1540 -.0500 .1170

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.090  
SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .5000 .5075 .5188 .5339 .5602 .5355 .5506 .5581 .5732 .5958 .3270 .3953 .5120

PHI  
.000 1.2910 1.0970 .5280 -.0980 -.0940 -.0170  
20.000 .4380 -.1530 -.1670 -.0190  
40.000 .3720 -.1530 -.1830 -.0380  
55.000 .2950 -.1540 -.2010 -.0360  
70.000 .1990 -.1920 -.2220 .0820  
90.000 .6770 .1200 -.2430 -.1990 .1110  
120.000 .0820 -.2030 -.1470 .2230  
142.000 .1060 -.1470 -.0450 .3270  
150.000  
157.000  
162.000  
165.000  
169.000  
172.000  
180.000

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
.000 .0510  
40.000 .0700  
70.000 -.0740  
90.000 -.0360  
109.000  
120.000  
130.000  
140.000  
150.000  
160.000  
170.000  
180.000

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI  
.000 .0510  
40.000 .0700  
70.000 -.0740  
90.000 -.0360  
109.000  
120.000  
130.000  
140.000  
150.000  
160.000  
170.000  
180.000

AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

(RDC827)

MAC ( 2 ) = 2.000

BETAT ( 1 ) = -8.300

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
20.000	1.2750	1.0060	.6270	.1290	.0100	.1140		.0290		-.0450	-.0330	-.0670	-.0590	-.0200	
40.000			.6920	.2630	.1430	.0730		.0160		-.0440					
60.000			.7810	.3640	.4130	.1080		.0200		-.0360	-.0740	-.0680	.0970	.1150	
80.000			.7890	.4970	.2830			.1900		.1050					
100.000			.7540	.3400	.4080	.3050		.2170		.1720	.1610	-.0740	-.0420	.0570	
120.000	1.1360		.6600	.2150	.3620	.3120		.2410		.2190	-.0360	-.0900	-.0450	.0020	
140.000			.5290	.1590	.2050	.2880		.5430		.0970	-.0590	-.0130	-.0240	-.0750	
160.000			.4250	.0880	.1330	.3790		.6770		-.0890	-.0790	.0000	-.0160	-.0130	
180.000							.8150								
200.000								.6430							
220.000								.4750		-.0870	-.0370	-.0710	-.0980	-.0300	
240.000	1.2750	.7780	.2560	.0590	.0740	.4330	.7290								
260.000								.6470		-.2170	-.1810	-.2680	-.2440	-.1350	

X/LB

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

PHI .0000

40.000	-.0480														
60.000	-.1140	.1050	.3020	.2570	.1910	-.0480		-.0810		-.0560					
80.000		-.0390	-.0620	-.0880	-.0720	-.0290	-.0580			-.1700					
100.000		-.1020	-.0600	-.0590	.0510	.0270	.0530								
120.000			.1360	.1840	.0750	-.0190	-.0620								
140.000				.5850	.2930	.0240	-.0420	.0680							
160.000	-.1010	-.1220	.0950	.1330	-.1160	-.1670	-.1610								
180.000		-.0900	.0300	-.0390	-.1850	-.1320	-.1010								
200.000		-.0540	.0460	.0890	.0090	.0600	-.0050								
220.000		-.1840	-.1620	-.0950											

MAC ( 2 ) = 2.000

BETAT ( 2 ) = -6.250

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
20.000	1.2920	1.0270	.6440	.1340	-.0010	.1690		.0660		.0330	-.0260	-.0810	-.0800	-.0360	
40.000			.6810	.2520	.1060	.1320		.0540		-.0190					
60.000			.7330	.2610	.3550	.1230		.0290		-.0250	-.0740	-.0360	.0730	.0850	
80.000			.7190	.3140	.4310	.2470		.1630		.0780					
100.000			.6810	.2910	.3900	.2640		.1890		.1530	-.0280	-.0100	-.0660	.0170	
120.000	1.0830		.6160	.1760	.2210	.2700		.2170		.1890	-.0530	-.0180	-.0370	-.0240	
140.000			.5140	.1430	.1770	.2470		.4930		.0890	-.0320	-.0120	-.0120	-.0190	

X/LB

(R000027)

AMFES 97-7117 1A9 C2A + S3 + T9 ORBITER FUSELAGE

```

      NACH ( 2 ) = 2.4999
      BETAT ( 2 ) = -6.2591

```

## SECTION ( 1 ) OF BYTER FUSELAGE

DEPENDENT VARIABLE: CF

[illegible]
$$\text{MACRO} (3) = 2.1477 \quad \text{BETAT} (3) = -4.2022$$

## SECTION (1) ORBITER FUSELAGE

DEPENDENT VARIABLE CF

[illegible]



AMES 97-717 1A9 02A + S3 + T9 ORBITER FUSELAGE

(R00927)

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.120

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CF

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

## PHI

70.000 -0.1030 -0.1140 -0.1220 -0.0780 -0.0720 -0.1000 -0.1070  
 80.000 -0.0650 -0.0910 -0.1110 -0.0290 -0.0450 -0.0870 -0.1160  
 100.000 .0480 .0280 .0390 -0.0390 -0.1000 -0.1230  
 110.000  
 120.000 -0.0460 -0.0400 .0810 .0790 -0.0680 -0.0930 -0.0970  
 130.000 .1850 .1880 -0.0700 -0.0400 -0.0140  
 150.000 -0.0450 -0.0340 .1290 .1450 .0130 .0120 -0.0020  
 165.000 -0.0510 .1390 .1760 .1000 .0560 -0.0630  
 180.000 -0.0700 -0.0290 .0400

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.970

## SECTION ( 1 ) ORBITER FUSELAGE

## DEPENDENT VARIABLE CF

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

## PHI

0.000 1.2870 1.0130 .6400 .1440 .0710 .2190  
 20.000 .6190 .1730 -0.0220 .2560  
 40.000 .5490 .1710 .0280 .2130  
 50.000 .4710 .1720 .0570 .1190  
 70.000 .3860 .0200 .0220 .0630  
 90.000 .7890 .3110 -0.0350 .0400 .0550  
 120.000 .2720 -0.0210 -0.0100 .0850  
 140.000 .2800 .0070 .0420 .2070  
 157.000  
 162.000 .5200  
 165.000 .4570  
 169.000 .5090  
 172.000 .6400  
 180.000 1.2870 .8250 .0640 .0920 .3720  
 180.000 .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

## PHI

0.000 .0920  
 40.000 .0640  
 70.000 .1010  
 90.000 -0.0960 -0.1190 -0.0840 -0.0910 -0.1110 -0.1260  
 110.000 -0.0680 -0.0900 -0.0350 -0.0710 -0.0760 -0.1100 -0.1200  
 115.000 -0.0170 -0.0320 -0.0750 -0.1110 -0.1290  
 130.000  
 150.000 -0.0560 -0.0670 .1230 .0160 -0.1060 -0.1010  
 170.000 .4210 .2870 -0.1070 -0.1000 -0.0710  
 190.000 -0.0720 -0.0360 .1700 .3920 -0.0810 -0.0250 -0.0420







DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A98

(R00B28) ( 24 MAY 73 )

AMES 97-707 1A9 Q2A + S3 + T9 ORBITER FUSELAGE

## PARAMETRIC DATA

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

ALPHAT = 8.0000 ORBINC = .0000  
 RUDDER = 15.0000 ELEVON = .0000  
 RUDDLR = .0000

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.350

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER FUSELAGE

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI	0.000	1.3510	1.1700	.5450	-.1300	-.1810	-.0080	-.0930	-.0090	-.0870	-.0710	.1280	.0830	.1120
20.000	.7590	.0660	-.0650	-.1110	-.0780	-.0960	.1240	.2050	.1370	.1150	-.1840	-.0280	-.0410	-.0410
40.000	.9960	.2920	.3930	.1270	.0380	.0860	.1290	.5020	-.0070	-.2660	-.2250	.1920	-.2100	-.1510
55.000	1.1020	.3950	.3050	.1600	.7870	.4870	.3020	.4350	-.2210	-.1630	-.1890	-.1790	-.1110	
70.000	.8660	.4380	.3050	.1600	.7610	.4350			-.4170	-.3420	-.4480	-.3680	-.2240	
90.000	.6510	.2520	.3040	.1800										
120.000	1.1390	.4130	.1140	.2280	.9262	.8348	.9639	1.0015	1.0392					
140.000	.2840	-.0320	.1350	.4320										
150.000														
157.000														
162.000														
165.000														
169.000														
172.000	.5990	.0930	-.0670	.0310	.4030									
180.000	1.3510	.5990	.0930	-.0670	.4030									
X/LB	.5973	.6626	.7380	.7869	.8283	.8348	.9262	.9639	1.0015	1.0392				
PHI	.000	.1160												
40.000	.2270	.4970	.3270	.2980	-.0290	-.2530	-.1090							
70.000	-.1020	-.1180	-.1980	-.1130	-.0940	-.1070	-.1080							
90.000	-.1060	-.1000	-.2690	-.0270	.0030	-.1130	-.1430							
105.000			.1050	.1780	.0050	-.1300	-.1630							
111.000			.6430	.1760	-.0560	-.2130	-.1390							
120.000	-.2030	-.1650	.1760	.1170	-.2330	-.2330	-.0560							
135.000			.1760	.1170	-.2330	-.2330	-.0560							
150.000	-.0940	-.0120	.1050	.1780	.0050	-.1300	-.1630							
165.000	-.0940	-.0120	.1050	.1780	.0050	-.1300	-.1630							
180.000	-.0940	-.0120	.1050	.1780	.0050	-.1300	-.1630							

**TABLULATED PRESSURE DATA - 1A93**

JAMES 97-757 1A9 C2A + S3 + T9 CREI TER FUSELAGE

**REVENUE:**

**DETAT ( 2 ) = -6.300**

MACH ( 2 ) = 2.555

**DEPENDENT VARIABLE CP**

## SECTION (1) ORBITER FUSELAGE

[illegible]

144

[illegible]

BETAT ( 3). = -4.230

**MACH (1) = 1.555**

**DEPENDENT VARIABLE CP**

## SECTION 1100BATER FUSELAGE

X/LB	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI														
1.4540	1.2060	.5540	-.1420	-.2070	.0550		.0460		-.0560	-.1340	-.1380		-.0470	.0480
20.000		.6780	-.0050	-.1110	.0130		.0650		-.0440					
40.000		.8180	.0480	.1420	-.0550		-.0450		-.0270	-.1200	.0660	.0230	.0230	.1670
55.000		.8230	.1850	.2420	.0810		-.0020		.0620					
70.000		.7230	.2380	.1670	.1120		.1270		.1270	-.1400	-.2130	-.0520	-.0540	
90.000	1.1000	.5320	.0870	.1850	.1330		.1160		.0600	-.1760	-.2370	-.1150	-.0960	
120.000		.3340	.0150	.1370	.1500		.4270		-.0650	-.2500	-.2580	-.2280	-.1570	

(REC-28)

AVES 97-717 1A9 C2A + S3 + T9 ORBITER FUSELAGE

**RACH ( 1 ) = 1.555**  
**BETAT ( 3 ) = -4.230**

**DEPENDENT VARIABLE CP**

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PRI															
142.000															
150.000															
157.000															
162.000															
165.000															
169.000															
172.000															
180.000															
1.4540	.6430	.0990	.0990	-.0610	.0390	.5360	.8450		.5460	-.4040	-.2750	-.2310	-.2150	-.2060	
1.5870	.6626	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392						

PHI

Year	Value	Unit
1960	10.23	1000
1961	10.23	1000

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2
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43.110	.119	.436	.210	.218	-.065	-.279
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[illegible]

71.160	- .1320	- .1550	- .2190	- .1250	- .1180	- .1390	- .1220
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	- .1250	- .1167	- .1447	- .0589	- .0447	- .1457	- .1737
09.00.00							

[illegible]

05.500	.0900	.1150	-.0410	-.1600	-.1570
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0750

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WACH ( 1 ) = 1.555
DETAT ( 4 ) = -.110
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## DEPENDENT VARIABLE CP

[illegible]

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE (RBC028)

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PMI															
180.000	1.4970	.6880	.0780	-.0730	.0320	.6430			.5490		-.3760	-.3300	-.1700	-.1890	-.1640
X/LB	.5873	.6625	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PMI															
.000	.0650							-.0490		-.0260					
40.000	.0840	.2890		.1300	.1470	-.1280	-.3220			-.0520					
70.000		-.1390	-.1690	-.2220	-.1280	-.1370	-.1520	-.1560							
90.000		-.1170	-.1190	-.0380	-.0860	-.0940	-.1720	-.2120							
105.000				.0620	.0280	-.0950	-.1850	-.2240							
110.000									-.0330						
120.000		-.0810	-.0650	.3700	.0660	-.1580	-.1730	-.1610	-.1130						
135.000			.3470	.2100	-.1950	-.0940	-.0600								
150.000		-.0390	.0470	.1560	.1450	-.0430	-.0360	-.0620							
165.000		-.0290		.1880	.2220	.0540	-.0340	-.1750							
180.000		-.0230	-.0200	.1410											

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 4.000

SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1516	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PMI															
.000	1.2940	1.2950	.5790	-.1320	-.1980	.0730		.0760		-.0620	-.1180	-.1620	.0090	.0890	
20.000			.5510	-.1280	-.1850	.0900		.0410		-.1020					
40.000			.5430	-.1210	-.1610	.0710		-.0020		-.1450	-.1530	-.0710	.0300	.0470	
55.000			.4930	-.0940	-.1100	.0360		-.0200		-.0120					
70.000			.4030	-.0800	-.1470	.0770		.0460		.0020	-.2410	-.3090	-.1760	-.0950	
90.000		.8400	.2780	-.1570	-.1050	.0580		.2120		-.0300	-.2690	-.3100	-.2120	-.0870	
120.000		.1600	.1600	-.1560	-.0640	.2370		.1480		-.1010	-.3080	-.2990	-.2450	-.0970	
142.000			.1480	-.1320	-.0080	.4440			-.2880	-.2950	-.3160	.0000	-.1980	-.1150	
150.000							.6770								
157.000									.3270		-.4190	-.3050	-.2000	-.1910	.1380
162.000									.3570						
165.000															
169.000					.7520										
172.000															
180.000	1.2940	.6800	.1110	-.0770	.0430	.5120		.5470		-.3820	-.3090	-.2490	-.2000	-.1610	
X/LB	.5873	.6625	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PMI															
.000	.0920							-.0320		-.0150					
40.000	.0450	.1380		.0700	.0660	-.1680	-.1620			-.0640					

DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A9B  
AMES 97-707 1A9 O2A + S3 + T9 ORBITER FUSELAGE

(RDC0828)

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 4.000

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PMI										
70.000	-.1290	-.1570	-.1910	-.0630	-.0640	-.1060	-.1350			
95.000	-.0760	-.1090	-.0330	-.0490	-.0740	-.1240	-.1360			
115.000			.0270	.0390	-.0730	-.1510	-.1920			.0360
120.000	-.0370	-.0120	.2020	.0560	-.1310	-.1220	-.1180			-.0960
135.000			.3520	.2710	-.1030	-.0610	-.0620			
150.000	-.0220	-.0060	.2440	.2970	-.0170	-.0350	-.0520			
165.000	-.0210		.2540	.2880	.0870	.0190	-.1710			
180.000	-.1090	-.0540	.1010							

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.060

SECTION ( 1 ) ORBITER FUSELAGE

DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2255	.2411	.3270	.3953	.5120
PMI															
20.000	1.2850	1.1970	.5580	-.1530	-.1780	.0320			.0100		-.0620	-.1270	-.1260	-.0850	.0710
25.000			.5140	-.1450	-.2010	.0480			.0250		-.1160		-.1780	.0220	.0165
30.000			.4670	-.1250	-.1880	.0420			-.0520		-.1690				
35.000			.4180	-.1080	-.1710	.0030			-.0310		-.0460				
40.000			.2950	-.1160	-.2020	.0860			.0810		-.0320	-.2630	-.3350	-.2030	-.1020
70.000			.1810	-.1970	-.1560	.0660			.2020		-.0520	-.2910	-.3340	-.2250	-.0890
90.000	.7340		.1080	-.1850	-.1110	.2130			.0160		-.1320	-.3220	-.3180	-.2460	-.0920
120.000			.1070	-.1530	-.0420	.3840			.3740		-.3450	-.3180	.0000	-.2080	-.1530
142.000								.6040							
150.000									.2790		-.4230	-.3390	-.2040	-.2050	-.1810
157.000									.3320						
162.000							.7480								
169.000						.4680			.5130						
172.000	1.2850	.6580	.0000	-.0730	.0430	.4680									
180.000	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					

PMI															
40.000	.0370														
45.000	.2220														
70.000	-.0070	-.1170	-.2510	-.1010	-.1080	-.1380	-.1710								
90.000	-.0010	-.0410	.0010	-.0690	-.1110	-.1760	-.1790								
115.000			.0910	-.0420	-.1130	-.1880	-.1990								
130.000								.0370							
135.000	.0430	.0590	.2190	-.1020	-.1620	-.1660	-.1580								
140.000			.4710	.2310	-.1420	-.1030	-.1000								
155.000	.0270	.0210		.2780	-.0530	-.0450	-.0830								

MACH (1) = 1.555

BETAT (6) = 6.560

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.0380 .2980 .3610 .0840 .0080 -.1880

165.000

-.1060 -.1290 .1570

180.000

MACH (1) = 1.555

BETAT (7) = 8.130

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

X/LB .0220 .0075 .0188 .0339 .0672 .1355 .1596 .1581 .1732 .1958 .2259 .2711 .3270 .3953 .5120

PHI

.5390 -.1040 .1100 .1060

.000

.4530 -.1500 .1730 .0790

20.000

.3780 -.1510 .1850 .0360

40.000

.2980 -.1430 .2030 .0460

55.000

.1970 -.1930 .2220 .0590

70.000

.1130 .2450 .2050 .0870

90.000

.0530 .2180 .1440 .2020

120.000

.0690 .1670 .0520 .3070

140.000

.5630

150.000

.2550

157.000

.3150

162.000

.4800

165.000

.7200

169.000

.9262 .8848

172.000

.0610 .0920 .0780 .0530 .4120

180.000

.5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

X/LB

PHI

.1080

.000

.0650

40.000

-.0920

70.000

-.0480

90.000

.0340

110.000

-.0130

120.000

.4770

130.000

-.1020

140.000

.2620

150.000

-.1090

160.000

-.1080

180.000

-.1160

.000

.1630

.000

.1910

.000

.2030

.000

.2140

.000

.1820

.000

.1230

.000

.1440

.000

.2240

.000

.000

.000

.000

.000

.000









DATE 20 SEP 73

TABULATED PRESSURE DATA - 1A9B

(F00228)

AMES 97-707 1A9 02A + S3 + T9 ORBITER FUSELAGE

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.110  
 SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP  
 X/LB .5873 .6626 .7380 .7869 .8282 .8848 .9262 .9639 1.0015 1.0392

PHI  
 70.000 -1.140 -1.260 -1.350 -1.400 -1.475 -1.530 -1.570 -1.600 -1.620  
 90.000 -1.750 -1.990 -2.030 -2.060 -2.100 -2.140 -2.170 -2.200 -2.220  
 105.000 .0350  
 120.000 -1.060 -1.070 -1.080 -1.090 -1.100 -1.110 -1.120 -1.130 -1.140  
 135.000 -1.880 -1.750 -1.650 -1.550 -1.450 -1.350 -1.250 -1.150 -1.050  
 150.000 -1.560 -1.420 -1.320 -1.220 -1.120 -1.020 -0.920 -0.820 -0.720  
 165.000 -1.040 -0.940 -0.840 -0.740 -0.640 -0.540 -0.440 -0.340 -0.240  
 180.000 -1.620 -1.520 -1.420 -1.320 -1.220 -1.120 -1.020 -0.920 -0.820

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990  
 SECTION ( 1 ) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB .0000 .0075 .0188 .0339 .0602 .1355 .1506 .1581 .1732 .1958 .2259 .2711 .3200 .3953 .5120

PHI  
 0.000 1.2790 1.0690 .7080 .0980 -0.650 .2200  
 20.000 .6770 .1290 -0.5720 .2620  
 40.000 .5880 .1290 -0.5170 .2160  
 55.000 .4870 .1460 .0180 .1030  
 70.000 .3890 .0130 -0.0210 .0710  
 85.000 .2950 -0.0450 -0.0370 .0550  
 100.000 .7770 .2410 -0.0370 -0.0130 .0030  
 120.000 .2380 -0.0220 .0140 .1830  
 140.000 .4980  
 150.000 .4190  
 160.000 .4640  
 170.000 .6250  
 180.000 .9639 1.0015 1.0392

X/LB .5873 .6626 .7380 .7869 .8282 .8848 .9262 .9639 1.0015 1.0392

PHI  
 0.000 .1170  
 40.000 .0860  
 70.000 .1450  
 90.000 .1080  
 105.000 .0740  
 120.000 .0630  
 135.000 .0630  
 150.000 .0630  
 165.000 .0630  
 180.000 .0630

TABULATED PRESSURE DATA - 1A9E

DATE 20 SEP 73

AMES 97-737 1A9 C2A + S3 + T9 ORBITER FUSELAGE

(RBO828)

MACH ( 2 ) = 2.0000 BETAT ( 5 ) = 3.990

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
------	-------	-------	-------	-------	-------	-------	-------	-------	--------	--------

PHI

165.0000 .1300 .3240 .0220 .0280 -.0600

180.0000 -.0890 -.0180

180.0000 -.0920 -.0890 -.0180

MACH ( 2 ) = 2.0000 BETAT ( 6 ) = 6.050

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER FUSELAGE

X/LB	.0200	.0375	.0188	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

PHI

1.2060 1.1130 .6880 .0740 -.0640 .1650

2.0000 .6350 .0670 -.0940 .2530

4.0000 .5360 .0680 -.0820 .2160

5.5000 .4300 .0740 -.0590 .0630

7.0000 .3230 -.0380 -.0790 .0690

9.0000 .2430 -.0840 -.0610 .0120

12.0000 .1990 -.0670 -.0580 .0180

14.0000 .2090 -.0370 -.0060 .1510

15.0000 .1500 .0000 .0000 .5140

157.0000 .162.0000

165.0000

169.0000

172.0000

180.0000

1.2060 .7550 .2120 .0220 .0540 .3710

.5873 .6626 .7380 .7869 .8283 .8848 .9262 .9639 1.0015 1.0392

PHI

.0310

.0280

.1610

-.1110

-.0750

-.0630

-.0680

-.0850

-.1130

-.1320

-.1520

-.1760

-.2000

-.2260

-.2520

-.2770

-.2940

-.3130

-.3350

-.3580

-.3820

-.4070

-.4330

-.4600

-.4880

-.5170

-.5470

1825035

AMES 97-757 1A9 C2A + S3 + T3 CRBITER FUSELAGE

BETAT ( 7 ) = 8.195

$$\text{MACH} (2) = 2.1225$$

## SECTION (1) ORBITER FUSELAGE

## DEPENDENT VARIABLE CP

[illegible]

**T9 ORPITER BASE**

(R900001) (26 MAY 73)

## REFERENCE DATA

SRGF	=	2.4210	99. FT.	YARP	=	26.5300	INCHES
LRGF	=	59.6490	INCHES	YARP	=	.0000	INCHES
BRGF	=	59.6490	INCHES	ZARP	=	.0000	INCHES
SCALE	=	.0000	SCALE				

## DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE											
MACH ( 1 ) = 1.555	ALPHAT( 1 ) = -8.400	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	-2350	-2420	-2320	-2230	-2250	-2350	-2270	-2310	-2500
MACH ( 1 ) = 1.555	ALPHAT( 2 ) = -6.330	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	-2350	-2430	-2330	-2270	-2280	-2330	-2220	-2310	-2490
MACH ( 1 ) = 1.555	ALPHAT( 3 ) = -4.290	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	-2320	-2380	-2290	-2240	-2280	-2320	-2140	-2450	-2460
MACH ( 1 ) = 1.555	ALPHAT( 4 ) = -2.190	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	-2330	-2400	-2320	-2290	-2330	-2330	-2160	-2360	-2480
MACH ( 1 ) = 1.555	ALPHAT( 5 ) = -.120	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	-2370	-2420	-2380	-2340	-2340	-2380	-2230	-2350	-2510
MACH ( 1 ) = 1.555	ALPHAT( 6 ) = 1.950	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	-2310	-2360	-2340	-2310	-2340	-2340	-2180	-2280	-2490
MACH ( 1 ) = 1.555	ALPHAT( 7 ) = 4.010	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	-2310	-2340	-2280	-2310	-2310	-2290	-2140	-2160	-2370
MACH ( 1 ) = 1.555	ALPHAT( 8 ) = 6.080	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	-2330	-2360	-2340	-2320	-2320	-2320	-2190	-2180	-2410
MACH ( 1 ) = 1.555	ALPHAT( 9 ) = 8.130	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	-2320	-2360	-2290	-2320	-2320	-2320	-2160	-2230	-2380
MACH ( 2 ) = 2.000	ALPHAT( 1 ) = -8.360	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	-1570	-1600	-1580	-1540	-1540	-1560	-1620	-1640	-1690

(RBOC:11)

AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

## SECTION ( 1 ) ORBITER BASE DEPENDENT VARIABLE Cp

MACH ( 2 ) = 2.000	ALPHAT( 2 ) = -6.310	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1630	-.1660	-.1653	-.1590	.0000	-.1610	-.1640	-.1760
MACH ( 2 ) = 2.000	ALPHAT( 3 ) = -4.230	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1630	-.1710	-.1680	-.1630	.0000	-.1630	-.1630	-.1790
MACH ( 2 ) = 2.000	ALPHAT( 4 ) = -2.210	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1720	-.1760	-.1730	.0000	.0000	-.1740	-.1740	-.1870
MACH ( 2 ) = 2.000	ALPHAT( 5 ) = -.160	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1730	-.1790	-.1800	.0000	.0000	-.1770	-.1760	-.1800
MACH ( 2 ) = 2.000	ALPHAT( 6 ) = 1.890	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1770	-.1790	-.1800	.0000	.0000	-.1820	-.1780	-.1930
MACH ( 2 ) = 2.000	ALPHAT( 7 ) = 3.930	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1780	-.1830	-.1840	.0000	.0000	-.1820	-.1830	-.1960
MACH ( 2 ) = 2.000	ALPHAT( 8 ) = 5.980	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1780	-.1820	-.1840	.0000	.0000	-.1840	-.1870	-.1950
MACH ( 2 ) = 2.000	ALPHAT( 9 ) = 8.020	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1820	-.1870	-.1880	-.1870	.0000	-.1890	-.1910	-.2000



(RBOC02) ( 24 MAY 73 )

AWES 97-707 1A9 02A + S3 + T9 ORBITER BASE

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.9490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.140

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.2640	-.2660	-.2610	.0000	-.2590	-.2770	-.3080	-.2820

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.100

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.2500	-.2550	-.2470	.0000	-.2480	-.2480	-.2810	-.2680

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.2430	-.2480	-.2390	.0000	-.2450	-.2300	-.2540	-.2530

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.110

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.2510	-.2550	-.2490	.0000	-.2520	-.2390	-.2580	-.2620

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.140

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.2620	-.2650	-.2610	.0000	-.2630	-.2430	-.2630	-.2690

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.190

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.2660	-.2680	-.2680	.0000	-.2670	-.2390	-.2610	-.2750

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.320

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1780	-.1820	-.1810	.0000	-.1770	-.1640	-.2090	-.1950

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.270

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1810	-.1850	-.1850	.0000	-.1820	-.1760	-.2250	-.1970

MACH ( 2 ) = 2.000 BETAT ( 3 ) = 1.210

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1860	-.1890	-.1920	.0000	-.1850	-.1930	-.2280	-.2050

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.990

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1920	-.1980	-.1970	.0000	-.1960	-.2000	-.2180	-.2070

## PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUOFLR = .000

AMES 97-787 1A9 02A + S3 + T9 ORBITER BASE (RBOC02)

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

WACH ( 2 ) = 2.000	BETAT ( 5 ) = 6.060	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1660	-.1910	-.1930	-.1930	.0000	-.1690	-.2130	-.1960
WACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.120	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1920	-.1960	-.1960	-.1940	.0000	-.1960	-.2230	-.2020

DATE 21 SEP 73  
TABULATED PRESSURE DATA - 1A98

(RBOC03) ( 24 MAY 73 )

AVES 97-707 1A9 02A + S3 + T9 ORBITER BASE

## REFERENCE DATA

SREF = 2.4210 50.FT. XGRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YGRP = .0000 INCHES  
BREF = 39.8490 INCHES ZGRP = .0000 INCHES  
SCALE = .0300 SCALE

## DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.120

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.080

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.110

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.140

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.300

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.290

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.970

## PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500  
RUDDER = .000 ELEVON = .000  
RUDDFLR = .000

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.2570	-.2560	-.2570	.0000	-.2520	-.2650	-.3090	-.2860
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.2460	-.2490	-.2440	-.2460	.0000	-.2410	-.2470	-.2850
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.2420	-.2470	-.2380	-.2390	.0000	-.2410	-.2300	-.2530
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.2470	-.2490	-.2490	-.2450	.0000	-.2530	-.2260	-.2490
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.2560	-.2590	-.2580	-.2570	.0000	-.2560	-.2330	-.2620
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.2600	-.2620	-.2650	-.2590	.0000	-.2600	-.2330	-.2680
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1800	-.1830	-.1860	-.1830	.0000	-.1790	-.1760	-.2290
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1820	-.1870	-.1880	-.1870	.0000	-.1830	-.1820	-.2410
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1840	-.1880	-.1880	-.1880	.0000	-.1830	-.1910	-.2270
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1930	-.1950	-.1980	-.1930	.0000	-.1920	-.1990	-.2150

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AVES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(BBOC03)

SECTION ( 1 ) ORBITER BASE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.0000 BETAT ( 5 ) = 0.0000	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1880	-.1930	-.1930	-.1910	.0000	-.1970	-.1990	-.2160	-.1990
MACH ( 2 ) = 2.0000 BETAT ( 6 ) = 0.0000	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1920	-.1980	-.1980	-.1990	.0000	-.1940	-.1910	-.2190	-.2030

AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(R80C04) ( 24 MAY 73 )

## REFERENCE DATA

SRCP = 2.4210 SQ.FT. YMRP = 26.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BRCP = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 4.000 ORBITINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUOFLR = .000

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.090	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2510	-.2550	-.2510	-.2520	.0000	-.2480	-.2610	-.3060	-.2620
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -5.070	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2450	-.2480	-.2410	-.2440	.0000	-.2430	-.2489	-.2870	-.2680
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.040	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2410	-.2420	-.2360	-.2380	.0000	-.2360	-.2340	-.2520	-.2560
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.060	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2430	-.2470	-.2470	-.2430	.0000	-.2470	-.2230	-.2460	-.2520
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.080	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2520	-.2540	-.2540	-.2510	.0000	-.2530	-.2240	-.2540	-.2610
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.100	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2570	-.2600	-.2590	-.2560	.0000	-.2590	-.2260	-.2570	-.2640
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.270	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1760	-.1800	-.1800	-.1780	.0000	-.1750	-.1840	-.2370	-.1920
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.240	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1830	-.1860	-.1880	-.1870	.0000	-.1830	-.1880	-.2400	-.2090
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.200	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1840	-.1870	-.1870	-.1860	.0000	-.1820	-.1910	-.2310	-.2040
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.950	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1670	-.1690	-.1920	-.1970	.0000	-.1880	-.1950	-.2140	-.2110

ANES 97-707 1A2 02A + S3 + T9 ORBITER BASE

(PROCU4)

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

WACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.990	TAP NO A	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
			.000	-.1830	-.1878	-.1890	-.1870	.0000	-.1850	-.1810	-.2100	-.1940
WACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.090	TAP NO A	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
			.000	-.1900	-.1970	-.1960	-.1920	.0000	-.1910	-.1860	-.2090	-.2080

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

PAGE 335

ANES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBOC05) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 39. FT.    YARP = 28.5300 INCHES  
 LREF = 39.8490 INCHES    YARP = .0000 INCHES  
 BREF = 39.8490 INCHES    ZARP = .0000 INCHES  
 SCALE = .03000 SCALE

## PARAMETRIC DATA

ALPHAT = 2.000    ORBINC = .500  
 RUDDER = .000    ELEVON = .000  
 RUFLUR = .000

## DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE		DEPENDENT VARIABLE CP									
MACH	BETAT ( 1 ) = 1.555	BETAT ( 2 ) = 1.555	BETAT ( 3 ) = 1.555	BETAT ( 4 ) = 1.555	BETAT ( 5 ) = 1.555	BETAT ( 6 ) = 1.555	BETAT ( 7 ) = 1.555	BETAT ( 8 ) = 1.555	BETAT ( 9 ) = 1.555	BETAT ( 10 ) = 1.555	BETAT ( 11 ) = 1.555
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	10.000	11.000
A	.000	-.2480	-.2520	-.2470	.0000	-.2440	-.2560	-.3000	-.2790		
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
A	.000	-.2440	-.2470	-.2400	.0000	-.2410	-.2520	-.2780	-.2690		
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
A	.000	-.2400	-.2430	-.2340	.0000	-.2320	-.2340	-.2670	-.2510		
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
A	.000	-.2410	-.2470	-.2460	.0000	-.2430	-.2260	-.2320	-.2490		
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
A	.000	-.2450	-.2490	-.2490	.0000	-.2450	-.2170	-.2510	-.2550		
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
A	.000	-.2570	-.2600	-.2600	.0000	-.2570	-.2580	-.2160	-.2560	-.2640	
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
A	.000	-.1720	-.1760	-.1780	.0000	-.1750	-.1710	-.1830	-.2340	-.1960	
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
A	.000	-.1740	-.1770	-.1780	.0000	-.1730	-.1730	-.1830	-.2340	-.1950	
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
A	.000	-.1790	-.1840	-.1850	.0000	-.1830	-.1770	-.1920	-.2280	-.1980	
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
A	.000	-.1890	-.1890	-.1920	.0000	-.1890	-.1860	-.1930	-.2120	-.2010	





(R80C06) ( 24 MAY 73 )

TABULATED PRESSURE DATA - 1A98  
AVES 97-707 1A9 02A + S3 + T9 ORBITER BASE

DATE 21 SEP 73

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0000 SCALE

PARAMETRIC DATA

ALPHAT = .0000 ORBINC = .500  
RUDDER = .0000 ELEVON = .000  
RUOFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.100	A	.000	-.2390	-.2430	-.2410	-.2380	.0000	-.2310	-.2490	-.2620
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.060	A	.000	-.2390	-.2430	-.2390	-.2340	.0000	-.2360	-.2440	-.2630
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.060	A	.000	-.2400	-.2450	-.2360	-.2350	.0000	-.2310	-.2340	-.2750
MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.050	A	.000	-.2370	-.2440	-.2430	-.2360	.0000	-.2390	-.2240	-.2510
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.060	A	.000	-.2400	-.2440	-.2460	-.2400	.0000	-.2400	-.2120	-.2470
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.080	A	.000	-.2480	-.2510	-.2510	-.2480	.0000	-.2470	-.2050	-.2470
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.290	A	.000	-.1710	-.1740	-.1710	-.1700	.0000	-.1670	-.1840	-.2320
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.290	A	.000	-.1730	-.1770	-.1770	-.1760	.0000	-.1730	-.1860	-.2310
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -1.130	A	.000	-.1760	-.1810	-.1800	-.1790	.0000	-.1760	-.1810	-.1990
MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.990	A	.000	-.1780	-.1820	-.1850	-.1830	.0000	-.1800	-.1860	-.2050

**DATE 21 SEP 73**

**TABULATED PRESSURE DATA - 1A98**

**PAGE 338**

ANES 97-707 1A9 02A + 93 + T9 CRITTER BASE (RBOCT06)

SECTION (1) ORBITER BASE

DEPENDENT VARIABLE CP

**WACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.980**

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
A	.000	-.1750	-.1800	-.1810	-.1800	.0000	-.1770	-.1710	-.1970	-.1880

4

-.0000    -.1750    -.1600    -.1810    -.1620    .0000    .1770    -.1710    -.1970    -.1860

AVES 97-707 1AS OEA + S3 + T9 ORBITER BASE

(RBOC07) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 96.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 SREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHAT = -2.000 ORBINC = -500  
 RUDDER = .000 ELEVON = .000  
 RUDFLR = .000

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER BASE

MACH	( 1 ) = 1.555	BETAT ( 1 ) = -7.110	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -5.090	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.070	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.040	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.060	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.060	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.310	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.260	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.230	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.940	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000

TABULATED PRESSURE DATA - 1A98

(R80C07)

AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

DATE 21 SEP 73

SECTION ( 1 ) ORBITER BASE		DEPENDENT VARIABLE CP									
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 9.970		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1720	-.1760	-.1750	.0000	-.1730	-.1640	-.1910	-.1880
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 9.010		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1730	-.1770	-.1770	.0000	-.1730	-.1580	-.1890	-.1870

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBOC08) ( 24 MAY 73 )

PARAMETRIC DATA

REFERENCE DATA

SECT = 2.4210 58. FT. XRRP = 28.5300 INCHES  
 LREF = 50.8490 INCHES YRRP = .0000 INCHES  
 BRP = 50.8490 INCHES ZRRP = .0000 INCHES  
 SCALE = .0000 SCALE

ALPHAT = -4.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUOFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.130	A	.000	-.2310	-.2360	-.2280	-.2180	.0000	-.2230	-.2280	-.2420
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.150	A	.000	-.2280	-.2310	-.2270	-.2170	.0000	-.2220	-.2270	-.2410
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -5.070	A	.000	-.2300	-.2370	-.2290	-.2200	.0000	-.2250	-.2280	-.2440
MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.030	A	.000	-.2220	-.2300	-.2220	-.2160	.0000	-.2270	-.2030	-.2340
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.050	A	.000	-.2250	-.2320	-.2240	-.2150	.0000	-.2360	-.2070	-.2380
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.070	A	.000	-.2280	-.2300	-.2280	-.2220	.0000	-.2310	-.1930	-.2370
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.310	A	.000	-.1630	-.1680	-.1670	-.1650	.0000	-.1580	-.1820	-.1870
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.270	A	.000	-.1740	-.1740	-.1730	-.1700	.0000	-.1710	-.1890	-.1970
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230	A	.000	-.1710	-.1760	-.1760	-.1740	.0000	-.1710	-.1920	-.1960
MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.920	A	.000	-.1720	-.1760	-.1780	-.1770	.0000	-.1730	-.1770	-.1880

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBOC08)

AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.960

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000

A

.000 -.1760 -.1800 -.1810 -.1790 .0000 -.1760 -.1750 -.1890

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.010

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000

A

.000 -.1710 -.1760 -.1770 -.1790 .0000 -.1720 -.1900 -.1860

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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(RBOC09) ( 24 MAY 73 )

AXES 97-707 1A9 02A + S3 + 79 ORBITER BASE

## REFERENCE DATA

REF = 2.4830 INCHES  
 LREF = 39.9480 INCHES  
 BREF = 39.8480 INCHES  
 SCALE = .0000 SCALE

XARP = 28.9300 INCHES  
 YARP = .0000 INCHES  
 ZARP = .0000 INCHES

## PARAMETRIC DATA

ALPHAT = -6.000  
 RUDDER = .000  
 RUOFLR = .000

ORBITNC = .500  
 ELEVON = .000

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER BASE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.160	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2200	-.2290	-.2190	-.2090	.0000	-.2110	-.2210	-.2290
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.170	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2190	-.2270	-.2190	-.2080	.0000	-.2180	-.2210	-.2290
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.180	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2230	-.2320	-.2220	-.2120	.0000	-.2230	-.2260	-.2340
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 3.640	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2190	-.2270	-.2220	-.2090	.0000	-.2220	-.1920	-.2070
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 5.690	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2150	-.2250	-.2160	-.2070	.0000	-.2240	-.1940	-.2150
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 7.740	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2190	-.2270	-.2130	-.2080	.0000	-.2320	-.1970	-.2160
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.340	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1550	-.1600	-.1550	-.1430	.0000	-.1490	-.1750	-.1660
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.300	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1630	-.1680	-.1660	-.1650	.0000	-.1620	-.1830	-.2280
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.250	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1640	-.1690	-.1690	-.1670	.0000	-.1610	-.1830	-.2230
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.930	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1660	-.1730	-.1730	-.1710	.0000	-.1660	-.1740	-.1840

**DATE OF SET 73**

**TABULATED PRESSURE DATA - 1A9B**

**PAGE 344**

AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBOC09)

## SECTION ( 1 ) ORBITER BASE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 5 ) = 8.020										
A											
	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		.000	-.1620	-.1670	-.1640	-.1630	.0000	-.1630	-.1490	-.1780	-.1770



000	-.1620	-.1670	-.1640	-.1630	.0000	-.1630	-.1490	-.1760	-.1770
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AMES 97-707 IAS OEA + S3 + T9 ORBITER BASE

(RBOC10) ( 24 MAY 73 )

## REFERENCE DATA

BREF = 28.4210 INCHES  
 LREF = 39.8490 INCHES  
 BREF = 39.8490 INCHES  
 SCALE = .0000 SCALE

ALPHAT = -6.000  
 RUDDER = .000  
 RUOFLR = .000

## PARAMETRIC DATA

ORBITAL = .900  
 ELEVON = .000

## DEPENDENT VARIABLE CP

## SECTION / 1) ORBITER BASE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -6.200	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2150	-.2220	-.2140	-.2010	.0000	-.2040	-.2210	-.2950	-.2250
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.210	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2110	-.2200	-.2110	-.1980	.0000	-.2070	-.2170	-.2620	-.2150
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.220	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2180	-.2260	-.2170	-.2010	.0000	-.2140	-.2250	-.2750	-.2280
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 3.650	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2130	-.2200	-.2120	-.2030	.0000	-.2190	-.1680	-.2010	-.2240
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 5.710	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2110	-.2210	-.2160	-.2010	.0000	-.2210	-.1920	-.2070	-.2210
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 7.770	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2120	-.2190	-.2030	-.2010	.0000	-.2310	-.1910	-.2040	-.2170
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -6.390	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1540	-.1580	-.1560	-.1530	.0000	-.1470	-.1770	-.2300	-.1900
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.330	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1640	-.1680	-.1680	-.1670	.0000	-.1620	-.1830	-.2320	-.1990
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.280	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1620	-.1680	-.1690	-.1630	.0000	-.1590	-.1860	-.2250	-.1970
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.170	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1570	-.1630	-.1590	-.1530	.0000	-.1570	-.1620	-.1900	-.1730

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

(RROC10)

AMES 97-707 1A9 OEA + S3 + T9 ORBITER BASE

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE

MACH ( 2 ) = 2.000	BETA ( 5 ) = 3.940	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1640	-.1700	-.1690	-.1670	.0000	-.1640	-.1710	-.1820
MACH ( 2 ) = 2.000	BETA ( 6 ) = 5.980	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1670	-.1720	-.1690	-.1710	.0000	-.1690	-.1710	-.1820
MACH ( 2 ) = 2.000	BETA ( 7 ) = 8.090	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1570	-.1640	-.1590	-.1560	.0000	-.1610	-.1490	-.1710

(RBOC11) ( 24 MAY 75 )

AVES 97-707 1A9 OEA + S3 + T9 ORBITER BASE

## REFERENCE DATA

REF = 2.4210 98.FT. XARP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YARP = .0000 INCHES  
 BREF = 39.8490 INCHES ZARP = .0000 INCHES  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHAT = -8.000 ORBITAL = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUOFLR = .000

## DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.420	A	.000	-.2200	-.2310	-.2220	-.2130	.0000	-.2090	-.2320	-.2650
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.360	A	.000	-.2170	-.2270	-.2200	-.2090	.0000	-.2130	-.2250	-.2250
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.310	A	.000	-.2240	-.2340	-.2240	-.2090	.0000	-.2220	-.2330	-.2640
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.180	A	.000	-.2460	-.2540	-.2460	-.2340	.0000	-.2400	-.2390	-.2790
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940	A	.000	-.2180	-.2270	-.2180	-.2060	.0000	-.2260	-.2010	-.2120
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000	A	.000	-.2200	-.2300	-.2160	-.2100	.0000	-.2300	-.2010	-.2210
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.060	A	.000	-.2230	-.2300	-.2150	-.2100	.0000	-.2400	-.2010	-.2230
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.350	A	.000	-.1580	-.1640	-.1620	-.1580	.0000	-.1520	-.1850	-.2230
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.340	A	.000	-.1650	-.1710	-.1700	-.1640	.0000	-.1600	-.1870	-.2330
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.290	A	.000	-.1660	-.1710	-.1710	-.1680	.0000	-.1620	-.1870	-.2130

AMES 97-707 1A9 QEA + S3 + T9 ORBITER BASE

(RBOC11)

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.160	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1590	-.1650	-.1610	-.1590	.0000	-.1570	-.1640	-.1710
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1640	-.1690	-.1670	.0000	-.1640	-.1670	-.1820	-.1810
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.960	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1700	-.1720	-.1720	.0000	-.1710	-.1720	-.1930	-.1840
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.040	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1610	-.1660	-.1630	.0000	-.1640	-.1490	-.1740	-.1750

DATE 21 SEP 75

TABULATED PRESSURE DATA - 1A98  
AMES 97-707 IAS OCA + S3 + T9 ORBITER BASE

(RROC12) ( 24 MAY 75 )

## PARAMETRIC DATA

## REFERENCE DATA

SREF = 2.4210 INCHES  
 LREF = 39.8490 INCHES  
 BREF = 39.8490 INCHES  
 SCALE = .0300 SCALE

ALPHAT = -4.000  
 RUDDER = -15.000  
 RUOFLR = .000

SECTION ( 1 ) ORBITER BASE		DEPENDENT VARIABLE CP									
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -0.350		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2340	-.2400	-.2360	-.2290	.0000	-.2270	-.2380	-.2960
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.310		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2290	-.2360	-.2300	-.2210	.0000	-.2260	-.2300	-.2440
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.280		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2330	-.2450	-.2330	-.2220	.0000	-.2350	-.2380	-.2810
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.170		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2460	-.2520	-.2470	-.2380	.0000	-.2430	-.2390	-.2630
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.930		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2280	-.2370	-.2320	-.2190	.0000	-.2310	-.2110	-.2270
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.980		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2300	-.2390	-.2350	-.2250	.0000	-.2350	-.2090	-.2310
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.020		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2340	-.2400	-.2340	-.2270	.0000	-.2430	-.2060	-.2410
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.320		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1670	-.1720	-.1700	-.1670	.0000	-.1590	-.1850	-.2230
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.280		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1760	-.1800	-.1790	-.1780	.0000	-.1720	-.1910	-.2270
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.240		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1750	-.1780	-.1780	-.1770	.0000	-.1720	-.1900	-.2280

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

(RBOC12)

AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

SECTION ( 1 ) ORBITER BASE		DEPENDENT VARIABLE CP									
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.170	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A	.000	-.1740	-.1790	-.1770	-.1730	.0000	-.1740	-.1730	-.1990	-.1860
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.920	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A	.000	-.1760	-.1810	-.1820	-.1800	.0000	-.1760	-.1780	-.1910	-.1910
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.960	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A	.000	-.1750	-.1790	-.1780	-.1770	.0000	-.1750	-.1680	-.1930	-.1880
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.010	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A	.000	-.1690	-.1740	-.1710	-.1720	.0000	-.1690	-.1520	-.1880	-.1830

DATE 21 SEP 73  
TABULATED PRESSURE DATA - 1A98  
AXES 97-707 1A9 02A + 33 + 19 ORBITER BASE

(RBOC13) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 98.FT. XMRP = 28.5300 INCHES  
LREF = 38.8490 INCHES YMRP = .0000 INCHES  
BREF = 38.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0000 SCALE

PARAMETRIC DATA

ALPHAT = .0000 ORBINC = .500  
RUDDER = -15.000 ELEVON = .000  
RUOFLR = .000

SECTION ( 1 ) ORBITER BASE		DEPENDENT VARIABLE CP									
MACH	BETAT	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
( 1 ) = 1.555		A	.000	-.2490	-.2530	-.2490	-.2480	.0000	-.2420	-.2520	-.3190
( 2 ) = 1.555		A	.000	-.2460	-.2510	-.2470	-.2440	.0000	-.2390	-.2590	-.2710
( 3 ) = 1.555		A	.000	-.2430	-.2480	-.2400	-.2320	.0000	-.2400	-.2470	-.2640
( 4 ) = 1.555		A	.000	-.2450	-.2510	-.2460	-.2400	.0000	-.2420	-.2380	-.2680
( 5 ) = 1.555		A	.000	-.2370	-.2420	-.2410	-.2330	.0000	-.2380	-.2220	-.2540
( 6 ) = 1.555		A	.000	-.2410	-.2460	-.2450	-.2410	.0000	-.2430	-.2200	-.2540
( 7 ) = 1.555		A	.000	-.2500	-.2540	-.2530	-.2460	.0000	-.2510	-.2160	-.2680
( 8 ) = 2.000		A	.000	-.1720	-.1760	-.1760	-.1740	.0000	-.1700	-.1820	-.1910
( 9 ) = 2.000		A	.000	-.1810	-.1850	-.1860	-.1840	.0000	-.1800	-.1980	-.2020
( 10 ) = 2.000		A	.000	-.1840	-.1870	-.1880	-.1870	.0000	-.1820	-.1970	-.2030

DATE 21 SEP 70

TABULATED PRESSURE DATA - 1A98  
AVES 97-707 1A9 02A + S3 + 19 ORBITER BASE

(R80C13)

SECTION ( 1 ) ORBITER BASE		DEPENDENT VARIABLE CP									
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.140		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1770	-.1800	-.1810	-.1800	.0000	-.1790	-.1770	-.1930
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1790	-.1940	-.1850	-.1830	.0000	-.1810	-.1830	-.1930
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.960		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1710	-.1770	-.1770	-.1750	.0000	-.1740	-.1640	-.1840
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.020		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1770	-.1820	-.1830	-.1790	.0000	-.1780	-.1620	-.1890



AVES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBOC14) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 96.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = 0000 SCALE

## PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUOFLR = .000

SECTION ( 1 ) ORBITER BASE		DEPENDENT VARIABLE CP									
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.300		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2620	-.2670	-.2630	.0000	-.2600	-.2690	-.3180	-.2910
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.260		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2620	-.2660	-.2600	.0000	-.2600	-.2700	-.3200	-.2900
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2530	-.2560	-.2500	.0000	-.2510	-.2570	-.2880	-.2760
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2400	-.2440	-.2380	.0000	-.2400	-.2280	-.2420	-.2510
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.950		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2500	-.2540	-.2520	.0000	-.2530	-.2350	-.2570	-.2610
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2520	-.2550	-.2540	.0000	-.2500	-.2210	-.2490	-.2610
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.040		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2590	-.2610	-.2620	-.2590	.0000	-.2600	-.2250	-.2650
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.250		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1810	-.1830	-.1860	-.1890	.0000	-.1790	-.2340	-.1950
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1850	-.1890	-.1920	-.1890	.0000	-.1830	-.1930	-.2420
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1880	-.1930	-.1930	-.1930	.0000	-.1870	-.1930	-.2340

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A90

AMES 97-707 1A9 OEA + S3 + T9 ORBITER BASE (RBOC14)

SECTION ( 1 ) ORBITER BASE		DEPENDENT VARIABLE CP									
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.130		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1820	-.1850	-.1870	-.1870	.0000	-.1860	-.2120	-.1990
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1890	-.1930	-.1950	-.1920	.0000	-.1910	-.2130	-.2030
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.950		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1810	-.1850	-.1860	-.1850	.0000	-.1830	-.2040	-.1930
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040		TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1930	-.1990	-.1990	-.1950	.0000	-.1940	-.2070	-.2040

(RBOC15) ( 24 MAY 73 )

AVES 97-707 1A9 O&amp;A + S3 + T9 ORBITER BASE

## PARAMETRIC DATA

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

ALPHAT = 6.0000 ORBINC = .5000  
 RUDDER = -15.0000 ELEVON = .0000  
 RUDDLR = .0000

## DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.320	A	.0000	-.2630	-.2670	-.2640	-.2640	.0000	-.2640	-.3220	-.2940
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.280	A	.0000	-.2630	-.2660	-.2610	-.2620	.0000	-.2610	-.3140	-.2920
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230	A	.0000	-.2570	-.2610	-.2530	-.2530	.0000	-.2540	-.2790	-.2790
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120	A	.0000	-.2430	-.2450	-.2420	-.2430	.0000	-.2440	-.2490	-.2540
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.970	A	.0000	-.2460	-.2510	-.2490	-.2450	.0000	-.2480	-.2310	-.2590
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.030	A	.0000	-.2560	-.2580	-.2590	-.2530	.0000	-.2570	-.2220	-.2640
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.080	A	.0000	-.2650	-.2680	-.2690	-.2630	.0000	-.2660	-.2330	-.2730
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.260	A	.0000	-.1860	-.1890	-.1930	-.1910	.0000	-.1860	-.1890	-.2190
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -4.210	A	.0000	-.1890	-.1930	-.1930	-.1920	.0000	-.1890	-.1940	-.2350
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -.130	A	.0000	-.1820	-.1850	-.1880	-.1870	.0000	-.1860	-.1890	-.2130

AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBOC15)

SECTION ( 1 ) ORBITER BASE		DEPENDENT VARIABLE CP									
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.9.0	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1870	-.1900	-.1920	-.1900	.0000	-.1860	-.2090	-.2100
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 6.000	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1820	-.1850	-.1860	.0000	-.1830	-.1730	-.2150	-.1920
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.000	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1880	-.1940	-.1930	.0000	-.1910	-.1810	-.2180	-.1990

DATE 21 JUN 73 TABULATED PRESSURE DATA - 1A98

AMES 97-757 1A9 08A + S3 + T9 ORBITER BASE (RBOC16) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = 8.0000 ORBINC = .5000  
RUDDER = -15.0000 ELEVON = .0000  
RUFLR = .0000

REFERENCE DATA

SREF = 2.4210 SQ.FT XREF = 25.5300 INCHES  
LREF = 39.8490 INCHES YREF = .0000 INCHES  
BREF = 39.8490 INCHES ZREF = .0000 INCHES  
SCALE = .0300 SCALE

SECTION ( 1 ) ORBITER BASE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.350	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2670	-.2710	-.2670	-.2680	.0000	-.2660	-.2640	-.2870
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.290	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2630	-.2660	-.2630	-.2590	.0000	-.2600	-.3040	-.2810
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2560	-.2600	-.2530	-.2510	.0000	-.2570	-.2540	-.2750
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.110	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2410	-.2450	-.2400	-.2410	.0000	-.2440	-.2260	-.2510
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 4.000	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2510	-.2540	-.2520	-.2470	.0000	-.2520	-.2380	-.2590
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.000	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2600	-.2640	-.2630	-.2580	.0000	-.2620	-.2400	-.2700
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.120	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2710	-.2730	-.2720	-.2700	.0000	-.2700	-.2450	-.2780
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.340	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2360	-.2480	-.2480	-.2470	.0000	-.2450	-.2300	.0000
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1880	-.1920	-.1930	-.1910	.0000	-.1870	-.1810	-.2050
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.220	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1890	-.1920	-.1950	-.1930	.0000	-.1900	-.1950	-.2090

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TABULATED PRESSURE DATA - 1A98

AMES 97-707 IAS O2A + S3 + T9 ORBITER BASE (RBOC16)

SECTION ( 1 ) ORBITER BASE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.125	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1870	-.1910	-.1920	-.1920	-.1890	-.1920	-.2230	-.2130
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.990	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1910	-.1970	-.1980	-.1960	-.1920	-.1990	-.2180	-.2070
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.080	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1830	-.1860	-.1870	-.1850	-.1840	-.1840	-.2040	-.1920
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.110	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1880	-.1930	-.1930	-.1920	-.1900	-.1870	-.2190	-.1970

(RBOC17) ( 24 MAY 73 )

AMES 97-707 1A9 O2A + S3 + T9 ORBITER BASE

## REFERENCE DATA

SRPF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = -8.0000 ORBINC = .5000  
 RUDDER = -10.0000 ELEVON = .0000  
 RUFLR = .0000

## DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.410	A	.000	-.2080	-.2160	-.2090	-.1960	.0000	-.1950	-.2180	-.2850
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.360	A	.000	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.300	A	.000	-.2060	-.2160	-.2100	-.1960	.0000	-.2030	-.2140	-.2760
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -2.180	A	.000	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.930	A	.000	-.2170	-.2260	-.2160	-.2020	.0000	-.2150	-.2230	-.2740
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990	A	.000	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.050	A	.000	-.2270	-.2340	-.2270	-.2180	.0000	-.2240	-.2240	-.2550
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.380	A	.000	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330	A	.000	-.2040	-.2140	-.2010	-.1960	.0000	-.2140	-.1860	-.2160
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280	A	.000	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -2.170	A	.000	-.2080	-.2160	-.2020	-.1940	.0000	-.2270	-.1870	-.2140
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930	A	.000	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.990	A	.000	-.2190	-.2290	-.2160	-.2020	.0000	-.2160	-.2280	-.2860
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.050	A	.000	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000
MACH ( 2 ) = 2.000 BETAT ( 8 ) = -6.330	A	.000	-.2060	-.2160	-.2040	-.1620	.0000	-.1550	-.1820	-.2290
MACH ( 2 ) = 2.000 BETAT ( 9 ) = -4.280	A	.000	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000
MACH ( 2 ) = 2.000 BETAT ( 10 ) = -2.170	A	.000	-.2160	-.2260	-.2160	-.2020	.0000	-.2150	-.2230	-.2740

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TABULATED PRESSURE DATA - 1A9B

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AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBOC17)

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1550	-.1620	-.1590	-.1560	.0000	-.1550	-.1660	-.1700

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1610	-.1680	-.1650	-.1630	.0000	-.1610	-.1620	-.1780

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1640	-.1690	-.1650	-.1650	.0000	-.1650	-.1610	-.1760

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1570	-.1630	-.1620	-.1590	.0000	-.1620	-.1470	-.1850



AMES 97-707 1A9 OSA + S3 + T9 ORBITER BASE

(RBOC18) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = -4.0000 ORBINC = .5000  
 RUDDER = -10.0000 ELEVON = .0000  
 RUDFLR = .0000

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.340	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2290	-.2370	-.2270	-.2190	.0000	-.2180	-.2310	-.2990	-.2420
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.300	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2270	-.2330	-.2280	-.2200	.0000	-.2210	-.2300	-.2940	-.2430
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.250	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2290	-.2390	-.2280	-.2170	.0000	-.2290	-.2310	-.2790	-.2440
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.160	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2360	-.2410	-.2350	-.2280	.0000	-.2320	-.2180	-.2460	-.2510
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.930	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2230	-.2330	-.2280	-.2130	.0000	-.2250	-.2120	-.2210	-.2370
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2290	-.2330	-.2270	-.2170	.0000	-.2290	-.2120	-.2330	-.2380
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.020	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2240	-.2300	-.2250	-.2160	.0000	-.2290	-.1940	-.2350	-.2350
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.320	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1610	-.1640	-.1620	-.1620	.0000	-.1540	-.1790	-.2230	-.1830
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1710	-.1750	-.1750	-.1730	.0000	-.1670	-.1880	-.2360	-.1990
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.230	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1710	-.1750	-.1740	-.1730	.0000	-.1640	-.1870	-.2230	-.1950

TABULATED PRESSURE DATA - 1A98

(RBOC18)

AVES 97-707 1A9 02A + S3 + T9 ORBITER BASE

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.160

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000  
A .000 -.1700 -.1760 -.1740 -.1730 .0000 -.1690 -.1810 -.2020 -.1850

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.920

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000  
A .000 -.1750 -.1790 -.1800 -.1780 .0000 -.1760 -.1720 -.1950 -.1970

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.960

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000  
A .000 -.1710 -.1750 -.1760 -.1780 .0000 -.1710 -.1620 -.1930 -.1850

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.010

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000  
A .000 -.1680 -.1700 -.1720 -.1690 .0000 -.1680 -.1440 -.1830 -.1810

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INSULATED PRESSURE DATA - 1A98

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(RBOC19) ( 24 MAY 73 )

AMES 97-707 1A9 OCA + S3 + T9 ORBITER BASE

## REFERENCE DATA

SREF = 2.4210 SQ. FT. XMRP = 24.5310 INCHES  
 LREF = 39.8495 INCHES YMRP = 10.0000 INCHES  
 BREF = 39.8495 INCHES ZMRP = 10.0000 INCHES  
 SCALE = 10.0000 SCALE

## PARAMETRIC DATA

ALPHAT = .0000 ORBINC = .0000  
 RUDDER = -10.0000 ELEVON = .0000  
 RUDDLR = .0000

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH	BETAT	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.320	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.2430	-.2500	-.2430	-.2390	.0000	-.2350	-.2480	-.3040
MACH ( 2 ) = 1.555	BETAT ( 2 ) = -6.270	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.2350	-.2410	-.2360	-.2310	.0000	-.2300	-.2400	-.2830
MACH ( 3 ) = 1.555	BETAT ( 3 ) = -4.240	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.2410	-.2470	-.2380	-.2310	.0000	-.2370	-.2410	-.2910
MACH ( 4 ) = 1.555	BETAT ( 4 ) = -1.140	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.2350	-.2420	-.2380	-.2320	.0000	-.2330	-.2210	-.2460
MACH ( 5 ) = 1.555	BETAT ( 5 ) = 3.950	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.2300	-.2340	-.2330	-.2270	.0000	-.2310	-.2310	-.2440
MACH ( 6 ) = 1.555	BETAT ( 6 ) = 5.990	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.2300	-.2360	-.2330	-.2280	.0000	-.2330	-.1990	-.2450
MACH ( 7 ) = 1.555	BETAT ( 7 ) = 8.040	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.2380	-.2420	-.2390	-.2350	.0000	-.2400	-.2020	-.2520
MACH ( 8 ) = 2.140	BETAT ( 8 ) = -8.300	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.1700	-.1750	-.1740	-.1720	.0000	-.1650	-.1810	-.2290
MACH ( 9 ) = 2.140	BETAT ( 9 ) = -6.260	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.1770	-.1800	-.1830	-.1800	.0000	-.1740	-.1920	-.2330
MACH ( 10 ) = 2.140	BETAT ( 10 ) = -4.220	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.1800	-.1830	-.1840	-.1830	.0000	-.1770	-.1930	-.2280

AMES 97-707 1A9 OEA + 33 + T8 ORBITER BASE (RBOC19)

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER BASE

MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.140	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1770	-.1828	-.1790	.0000	-.1770	-.1810	-.2020	-.1940
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1770	-.1810	-.1830	-.1800	.0220	-.1790	-.2010	-.1890
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1740	-.1780	-.1810	-.1760	.0440	-.1740	-.1630	-.1860
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.020	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1790	-.1830	-.1840	-.1800	.0220	-.1800	-.1610	-.1930

AWES 97-717 1A9 C&A + S3 + T9 ORBITER BASE  
(R9002U) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.421U 59. FT. YMRP = 29.530U INCHES  
LREF = 39.849U INCHES YMRP = .140U INCHES  
BREF = 39.849U INCHES ZMRP = .100U INCHES  
SCALE = .030U SCALE

## PARAMETRIC DATA

ALPHAT = 4.100U ORBINC = .000U  
RUDDER = -10.100U ELEVON = .000U  
RUDDLR = .000U

## DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE	TAP NO	1.000U	2.000U	3.000U	4.000U	5.000U	6.000U	7.000U	8.000U	9.000U
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.300U	A	.000U	-.254U	-.260U	-.252U	-.254U	.000U	-.252U	-.255U	-.302U
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270U	A	.000U	-.249U	-.252U	-.248U	.000U	-.248U	-.254U	-.290U	-.277U
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220U	A	.000U	-.250U	-.253U	-.245U	.000U	-.247U	-.249U	-.286U	-.269U
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.130U	A	.000U	-.232U	-.235U	-.230U	.000U	-.231U	-.214U	-.233U	-.241U
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.960U	A	.000U	-.242U	-.245U	-.245U	.000U	-.239U	-.243U	-.224U	-.250U
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.010U	A	.000U	-.245U	-.248U	-.245U	.000U	-.243U	-.247U	-.213U	-.251U
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.000U	A	.000U	-.258U	-.259U	-.261U	.000U	-.257U	-.258U	-.226U	-.265U
MACH ( 2 ) = 2.000U BETAT ( 1 ) = -8.280U	A	.000U	-.180U	-.185U	-.186U	.000U	-.183U	-.181U	-.189U	-.195U
MACH ( 2 ) = 2.000U BETAT ( 2 ) = -6.240U	A	.000U	-.182U	-.185U	-.187U	.000U	-.186U	-.181U	-.189U	-.206U
MACH ( 2 ) = 2.000U BETAT ( 3 ) = -4.200U	A	.000U	-.189U	-.189U	-.189U	.000U	-.189U	-.189U	-.189U	-.232U

## AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBOC2U)

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER BASE

MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.130	TAP NO 1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1800	-.1840	-.1840	.0000	-.1800	-.1900	-.1980
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.950	TAP NO 1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1870	-.1910	-.1930	-.1910	.0000	-.1890	-.2130
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.990	TAP NO 1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1820	-.1840	-.1860	-.1850	.0000	-.1830	-.1770
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.040	TAP NO 1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1900	-.1960	-.1960	-.1940	.0000	-.1910	-.1840

AMES 97-707 1A9 OEA + S3 + T9 ORBITER BASE

(RBCC21) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUDDLR = .000

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.330	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.290	A	1.000	-.2580	-.2640	-.2580	-.2590	.0000	-.2570	-.2600	-.2680
			1.000	-.2550	-.2600	-.2550	-.2550	.0000	-.2540	-.2580	-.2560
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.230	A	1.000	-.2510	-.2540	-.2490	-.2480	.0000	-.2500	-.2470	-.2730
			1.000	-.2350	-.2370	-.2320	-.2350	.0000	-.2350	-.2270	-.2350
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -1.120	A	1.000	-.2440	-.2470	-.2460	-.2420	.0000	-.2450	-.2370	-.2550
			1.000	-.2400	-.2430	-.2400	-.2400	.0000	-.2400	-.2330	-.2400
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.980	A	1.000	-.2500	-.2520	-.2530	-.2490	.0000	-.2520	-.2270	-.2580
			1.000	-.2620	-.2640	-.2650	-.2620	.0000	-.2610	-.2330	-.2680
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.100	A	1.000	-.1830	-.1870	-.1890	-.1870	.0000	-.1830	-.1830	-.1980
			1.000	-.1880	-.1910	-.1930	-.1920	.0000	-.1870	-.1910	-.2400
MACH ( 1 ) = 1.555	BETAT ( 7 ) = -0.310	A	1.000	-.1870	-.1910	-.1920	-.1920	.0000	-.1870	-.1920	-.2310
			1.000	-.1870	-.1910	-.1920	-.1920	.0000	-.1870	-.1920	-.2310

AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBC21)

## DEPENDENT VARIABLE CP

**SECTION (1) ORBITER BASE**

$$\text{MACRO\_BETAT}(\Delta) = -.120$$

TAP NO	1,000	2,000	3,000	4,000	5,000	6,000
A						

A 1920 - 1929 - 1930 - 1931 - 1932 - 1933 - 1934 - 1935 - 1936 - 1937 - 1938 - 1939 - 1940 - 1941 - 1942 - 1943 - 1944 - 1945 - 1946 - 1947 - 1948 - 1949 - 1950 - 1951 - 1952 - 1953 - 1954 - 1955 - 1956 - 1957 - 1958 - 1959 - 1960 - 1961 - 1962 - 1963 - 1964 - 1965 - 1966 - 1967 - 1968 - 1969 - 1970 - 1971 - 1972 - 1973 - 1974 - 1975 - 1976 - 1977 - 1978 - 1979 - 1980 - 1981 - 1982 - 1983 - 1984 - 1985 - 1986 - 1987 - 1988 - 1989 - 1990 - 1991 - 1992 - 1993 - 1994 - 1995 - 1996 - 1997 - 1998 - 1999 - 2000 - 2001 - 2002 - 2003 - 2004 - 2005 - 2006 - 2007 - 2008 - 2009 - 2010 - 2011 - 2012 - 2013 - 2014 - 2015 - 2016 - 2017 - 2018 - 2019 - 2020 - 2021 - 2022 - 2023 - 2024 - 2025 - 2026 - 2027 - 2028 - 2029 - 2030 - 2031 - 2032 - 2033 - 2034 - 2035 - 2036 - 2037 - 2038 - 2039 - 2040 - 2041 - 2042 - 2043 - 2044 - 2045 - 2046 - 2047 - 2048 - 2049 - 2050 - 2051 - 2052 - 2053 - 2054 - 2055 - 2056 - 2057 - 2058 - 2059 - 2060 - 2061 - 2062 - 2063 - 2064 - 2065 - 2066 - 2067 - 2068 - 2069 - 2070 - 2071 - 2072 - 2073 - 2074 - 2075 - 2076 - 2077 - 2078 - 2079 - 2080 - 2081 - 2082 - 2083 - 2084 - 2085 - 2086 - 2087 - 2088 - 2089 - 2090 - 2091 - 2092 - 2093 - 2094 - 2095 - 2096 - 2097 - 2098 - 2099 - 2100 - 2101 - 2102 - 2103 - 2104 - 2105 - 2106 - 2107 - 2108 - 2109 - 2110 - 2111 - 2112 - 2113 - 2114 - 2115 - 2116 - 2117 - 2118 - 2119 - 2120 - 2121 - 2122 - 2123 - 2124 - 2125 - 2126 - 2127 - 2128 - 2129 - 2130 - 2131 - 2132 - 2133 - 2134 - 2135 - 2136 - 2137 - 2138 - 2139 - 2140 - 2141 - 2142 - 2143 - 2144 - 2145 - 2146 - 2147 - 2148 - 2149 - 2150 - 2151 - 2152 - 2153 - 2154 - 2155 - 2156 - 2157 - 2158 - 2159 - 2160 - 2161 - 2162 - 2163 - 2164 - 2165 - 2166 - 2167 - 2168 - 2169 - 2170 - 2171 - 2172 - 2173 - 2174 - 2175 - 2176 - 2177 - 2178 - 2179 - 2180 - 2181 - 2182 - 2183 - 2184 - 2185 - 2186 - 2187 - 2188 - 2189 - 2190 - 2191 - 2192 - 2193 - 2194 - 2195 - 2196 - 2197 - 2198 - 2199 - 2200 - 2201 - 2202 - 2203 - 2204 - 2205 - 2206 - 2207 - 2208 - 2209 - 2210 - 2211 - 2212 - 2213 - 2214 - 2215 - 2216 - 2217 - 2218 - 2219 - 2220 - 2221 - 2222 - 2223 - 2224 - 2225 - 2226 - 2227 - 2228 - 2229 - 2230 - 2231 - 2232 - 2233 - 2234 - 2235 - 2236 - 2237 - 2238 - 2239 - 2240 - 2241 - 2242 - 2243 - 2244 - 2245 - 2246 - 2247 - 2248 - 2249 - 2250 - 2251 - 2252 - 2253 - 2254 - 2255 - 2256 - 2257 - 2258 - 2259 - 2260 - 2261 - 2262 - 2263 - 2264 - 2265 - 2266 - 2267 - 2268 - 2269 - 2270 - 2271 - 2272 - 2273 - 2274 - 2275 - 2276 - 2277 - 2278 - 2279 - 2280 - 2281 - 2282 - 2283 - 2284 - 2285 - 2286 - 2287 - 2288 - 2289 - 2290 - 2291 - 2292 - 2293 - 2294 - 2295 - 2296 - 2297 - 2298 - 2299 - 2300 - 2301 - 2302 - 2303 - 2304 - 2305 - 2306 - 2307 - 2308 - 2309 - 2310 - 2311 - 2312 - 2313 - 2314 - 2315 - 2316 - 2317 - 2318 - 2319 - 2320 - 2321 - 2322 - 2323 - 2324 - 2325 - 2326 - 2327 - 2328 - 2329 - 2330 - 2331 - 2332 - 2333 - 2334 - 2335 - 2336 - 2337 - 2338 - 2339 - 2340 - 2341 - 2342 - 2343 - 2344 - 2345 - 2346 - 2347 - 2348 - 2349 - 2350 - 2351 - 2352 - 2353 - 2354 - 2355 - 2356 - 2357 - 2358 - 2359 - 2360 - 2361 - 2362 - 2363 - 2364 - 2365 - 2366 - 2367 - 2368 - 2369 - 2370 - 2371 - 2372 - 2373 - 2374 - 2375 - 2376 - 2377 - 2378 - 2379 - 2380 - 2381 - 2382 - 2383 - 2384 - 2385 - 2386 - 2387 - 2388 - 2389 - 2390 - 2391 - 2392 - 2393 - 2394 - 2395 - 2396 - 2397 - 2398 - 2399 - 2400 - 2401 - 2402 - 2403 - 2404 - 2405 - 2406 - 2407 - 2408 - 2409 - 2410 - 2411 - 2412 - 2413 - 2414 - 2415 - 2416 - 2417 - 2418 - 2419 - 2420 - 2421 - 2422 - 2423 - 2424 - 2425 - 2426 - 2427 - 2428 - 2429 - 2430 - 2431 - 2432 - 2433 - 2434 - 2435 - 2436 - 2437 - 2438 - 2439 - 2440 - 2441 - 2442 - 2443 - 2444 - 2445 - 2446 - 2447 - 2448 - 2449 - 2450 - 2451 - 2452 - 2453 - 2454 - 2455 - 2456 - 2457 - 2458 - 2459 - 2460 - 2461 - 2462 - 2463 - 2464 - 2465 - 2466 - 2467 - 2468 - 2469 - 2470 - 2471 - 2472 - 2473 - 2474 - 2475 - 2476 - 2477 - 2478 - 2479 - 2480 - 2481 - 2482 - 2483 - 2484 - 2485 - 2486 - 2487 - 2488 - 2489 - 2490 - 2491 - 2492 - 2493 - 2494 - 2495 - 2496 - 2497 - 2498 - 2499 - 2500 - 2501 - 2502 - 2503 - 2504 - 2505 - 2506 - 2507 - 2508 - 2509 - 2510 - 2511 - 2512 - 2513 - 2514 - 2515 - 2516 - 2517 - 2518 - 2519 - 2520 - 2521 - 2522 - 2523 - 2524 - 2525 - 2526 - 2527 - 2528 - 2529 - 2530 - 2531 - 2532 - 2533 - 2534 - 2535 - 2536 - 2537 - 2538 - 2539 - 2540 - 2541 - 2542 - 2543 - 2544 - 2545 - 2546 - 2547 - 2548 - 2549 - 2550 - 2551 - 2552 - 2553 - 2554 - 2555 - 2556 - 2557 - 2558 - 2559 - 2560 - 2561 - 2562 - 2563 - 2564 - 2565 - 2566 - 2567 - 2568 - 2569 - 2570 - 2571 - 2572 - 2573 - 2574 - 2575 - 2576 - 2577 - 2578 - 2579 - 2580 - 2581 - 2582 - 2583 - 2584 - 2585 - 2586 - 2587 - 2588 - 2589 - 2590 - 2591 - 2592 - 2593 - 2594 - 2595 - 2596 - 2597 - 2598 - 2599 - 2600 - 2601 - 2602 - 2603 - 2604 - 2605 - 2606 - 2607 - 2608 - 2609 - 2

$$\text{BETAT} (S) = 3.975$$

TAP NO	1,000	2,000	3,000	4,000	5,000
A	-19.40	-21.50	-21.50	-21.50	-21.40

A	1937	1940	1945	1946
1	100.0	100.0	100.0	100.0
2	100.0	100.0	100.0	100.0
3	100.0	100.0	100.0	100.0
4	100.0	100.0	100.0	100.0
5	100.0	100.0	100.0	100.0
6	100.0	100.0	100.0	100.0
7	100.0	100.0	100.0	100.0
8	100.0	100.0	100.0	100.0
9	100.0	100.0	100.0	100.0
10	100.0	100.0	100.0	100.0
11	100.0	100.0	100.0	100.0
12	100.0	100.0	100.0	100.0
13	100.0	100.0	100.0	100.0
14	100.0	100.0	100.0	100.0
15	100.0	100.0	100.0	100.0
16	100.0	100.0	100.0	100.0
17	100.0	100.0	100.0	100.0
18	100.0	100.0	100.0	100.0
19	100.0	100.0	100.0	100.0
20	100.0	100.0	100.0	100.0
21	100.0	100.0	100.0	100.0
22	100.0	100.0	100.0	100.0
23	100.0	100.0	100.0	100.0
24	100.0	100.0	100.0	100.0
25	100.0	100.0	100.0	100.0
26	100.0	100.0	100.0	100.0
27	100.0	100.0	100.0	100.0
28	100.0	100.0	100.0	100.0
29	100.0	100.0	100.0	100.0
30	100.0	100.0	100.0	100.0
31	100.0	100.0	100.0	100.0
32	100.0	100.0	100.0	100.0
33	100.0	100.0	100.0	100.0
34	100.0	100.0	100.0	100.0
35	100.0	100.0	100.0	100.0
36	100.0	100.0	100.0	100.0
37	100.0	100.0	100.0	100.0
38	100.0	100.0	100.0	100.0
39	100.0	100.0	100.0	100.0
40	100.0	100.0	100.0	100.0
41	100.0	100.0	100.0	100.0
42	100.0	100.0	100.0	100.0
43	100.0	100.0	100.0	100.0
44	100.0	100.0	100.0	100.0
45	100.0	100.0	100.0	100.0
46	100.0	100.0	100.0	100.0
47	100.0	100.0	100.0	100.0
48	100.0	100.0	100.0	100.0
49	100.0	100.0	100.0	100.0
50	100.0	100.0	100.0	100.0
51	100.0	100.0	100.0	100.0
52	100.0	100.0	100.0	100.0
53	100.0	100.0	100.0	100.0
54	100.0	100.0	100.0	100.0
55	100.0	100.0	100.0	100.0
56	100.0	100.0	100.0	100.0
57	100.0	100.0	100.0	100.0
58	100.0	100.0	100.0	100.0
59	100.0	100.0	100.0	100.0
60	100.0	100.0	100.0	100.0
61	100.0	100.0	100.0	100.0
62	100.0	100.0	100.0	100.0
63	100.0	100.0	100.0	100.0
64	100.0	100.0	100.0	100.0
65	100.0	100.0	100.0	100.0
66	100.0	100.0	100.0	100.0
67	100.0	100.0	100.0	100.0
68	100.0	100.0	100.0	100.0
69	100.0			

$$1.25 - 2.10 \text{ GETAT } (6) = 6.120$$
[illegible][illegible]

25 - 1949: BEAT (7) = 8.07%

TAP NO	1,000	2,000	3,000	4,000	5,000	6,000	7,000
A							

06-2-1966 - 06-2-1966



AMES 97-707 1A9 ORA + S3 + T9 ORBITER BASE

(RBOC22) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ. FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 8.0000 ORBINC = .0000  
 RUDDER = -10.0000 ELEVON = .0000  
 RUFLR = .0000

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER BASE

MACH	( 1 )	1.555	BETAT ( 1 )	-8.360	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
					A	.000	-.2650	-.2700	-.2650	-.2660	.0000	-.2630	-.3170	-.2850
MACH	( 1 )	1.555	BETAT ( 2 )	-6.310	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
					A	.000	-.2590	-.2620	-.2570	-.2560	.0000	-.2570	-.3050	-.2790
MACH	( 1 )	1.555	BETAT ( 3 )	-4.230	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
					A	.000	-.2520	-.2570	-.2500	-.2490	.0000	-.2530	-.2840	-.2710
MACH	( 1 )	1.555	BETAT ( 4 )	-.110	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
					A	.000	-.2380	-.2410	-.2350	-.2350	.0000	-.2380	-.2220	-.2460
MACH	( 1 )	1.555	BETAT ( 5 )	3.940	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
					A	.000	-.2480	-.2510	-.2510	-.2460	.0000	-.2490	-.2350	-.2600
MACH	( 1 )	1.555	BETAT ( 6 )	6.060	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
					A	.000	-.2560	-.2590	-.2590	-.2560	.0000	-.2570	-.2370	-.2640
MACH	( 1 )	1.555	BETAT ( 7 )	8.120	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
					A	.000	-.2680	-.2650	-.2700	-.2670	.0000	-.2680	-.2460	-.2750
MACH	( 2 )	2.000	BETAT ( 1 )	-8.330	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
					A	.000	-.1810	-.1850	-.1850	-.1840	.0000	-.1800	-.2190	-.1980
MACH	( 2 )	2.000	BETAT ( 2 )	-6.280	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
					A	.000	-.1870	-.1910	-.1930	-.1920	.0000	-.1870	-.2280	-.2040
MACH	( 2 )	2.000	BETAT ( 3 )	-4.220	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
					A	.000	-.1940	-.1930	-.1960	-.1940	.0000	-.1900	-.2340	-.2090

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-757 1A9 02A + S3 + T9 ORBITER BASE

(RBOC22)

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.110	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1860	-.1890	-.1890	-.1890	-.1880	-.1910	-.2190	-.2010
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 4.000	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1900	-.1940	-.1960	-.1930	-.1940	-.1950	-.2150	-.2030
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.050	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1860	-.1920	-.1910	-.1880	-.1890	-.1840	-.2180	-.1950
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.110	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1900	-.1960	-.1960	-.1940	-.1930	-.1900	-.2200	-.1990

DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A9B

AMES 97-757 1A9 CGA + S3 + T9 ORBITER BASE

(RBOC23) ( 24 MAY 73 )

## PARAMETRIC DATA

ALPHAT = -8.0000 ORBINC = .0000  
 RUDDER = 15.0000 ELEVON = .0000  
 RUDEFLR = .0000

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5314 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.400	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.0000	-.2180	-.2270	-.2190	-.2030	.0000	-.2010	-.2310	-.2920	-.2320
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.380	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.0000	-.2160	-.2250	-.2170	-.2040	.0000	-.2000	-.2230	-.2880	-.2210
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.290	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.0000	-.2280	-.2360	-.2260	-.2120	.0000	-.2210	-.2360	-.2870	-.2340
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.170	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.0000	-.2420	-.2520	-.2440	-.2350	.0000	-.2380	-.2490	-.2740	-.2630
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.940	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.0000	-.2180	-.2270	-.2170	-.2080	.0000	-.2280	-.1940	-.2130	-.2290
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 8.160	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.0000	-.2150	-.2240	-.2130	-.2080	.0000	-.2320	-.1940	-.2180	-.2240
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.380	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.0000	-.1540	-.1590	-.1580	-.1550	.0000	-.1510	-.1830	-.2300	-.1920
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.330	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.0000	-.1680	-.1710	-.1720	-.1680	.0000	-.1610	-.1920	-.2360	-.2030
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.280	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.0000	-.1610	-.1670	-.1660	-.1610	.0000	-.1530	-.1810	-.2230	-.1950
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.170	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.0000	-.1590	-.1650	-.1620	-.1590	.0000	-.1580	-.1700	-.1920	-.1730

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBOC23)

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1668	-.1710	-.1690	-.1670	.0000	-.1710	-.1980	-.1830
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1690	-.1740	-.1710	-.1710	.0000	-.1690	-.1970	-.1830
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.040	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1630	-.1690	-.1630	-.1640	.0000	-.1690	-.1940	-.1780

AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBOC24) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT.    XMRP = 29.5300 INCHES  
 LREF = 39.8490 INCHES    YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES    ZMRP = .0000 INCHES  
 SCALE = .0314 SCALE

## PARAMETRIC DATA

ALPHAT = -4.000    ORBTNC = .000  
 RUDDER = 15.000    ELEVON = .000  
 RUOFLR = .000

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.330	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2330	-.2390	-.2310	-.2210	.0000	-.2220	-.2360	-.3950	-.2450
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.290	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2280	-.2340	-.2260	-.2200	.0000	-.2220	-.2280	-.2970	-.2420
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2330	-.2430	-.2310	-.2210	.0000	-.2340	-.2350	-.2630	-.2460
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.150	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2450	-.2520	-.2480	-.2390	.0000	-.2430	-.2410	-.2670	-.2620
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.940	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2280	-.2370	-.2330	-.2210	.0000	-.2290	-.2090	-.2240	-.2400
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2270	-.2350	-.2300	-.2250	.0000	-.2300	-.2060	-.2340	-.2400
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.030	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2280	-.2330	-.2280	-.2190	.0000	-.2360	-.2010	-.2290	-.2370
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.310	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1620	-.1660	-.1650	-.1650	.0000	-.1550	-.1830	-.2280	-.1860
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1710	-.1750	-.1760	-.1730	.0000	-.1680	-.1910	-.2350	-.2000
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.230	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1740	-.1780	-.1780	-.1770	.0000	-.1690	-.1920	-.2300	-.1990

(RBOC24)

AMES 97-707 1A8 CBA + S3 + T9 ORBITER BASE

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETA† ( 4 ) = -.160	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1720	-.1770	-.1750	-.1750	.0000	-.1720	-.1830	-.2030	-.1860
MACH ( 2 ) = 2.000	BETA† ( 5 ) = 3.920	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1760	-.1820	-.1800	-.1790	.0000	-.1790	-.1780	-.1990	-.1920
MACH ( 2 ) = 2.000	BETA† ( 6 ) = 5.960	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1750	-.1800	-.1800	-.1790	.0000	-.1750	-.1760	-.1980	-.1880
MACH ( 2 ) = 2.000	BETA† ( 7 ) = 6.010	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1750	-.1740	-.1750	-.1750	.0000	-.1700	-.1520	-.1900	-.1850

DATE: 21 SEP 73

TABULATE: PRESSURE DATA - 1A9B

PAGE 375

AUGS 27-707 1A9 02A + S2 + T9 ORBITER BASE (RBOC25) ( 24 MAY 73 )

## REF: DATA

SREF = 2.4210 SQ. FT. XREF = 20.5300 INCHES  
 LREF = 39.6490 INCHES YREF =  
 BREF = 39.6490 INCHES ZREF =  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = .000 ORBINC = .000  
 RUDRER = 15.000 ELEVON = .000  
 RUDFLR = .000

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.320	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2510	-.2550	-.2470	.0000	-.2400	-.2570	-.3100	-.2710
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.270	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2380	-.2430	-.2380	-.2340	.0000	-.2320	-.2460	-.2640
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2410	-.2460	-.2360	-.2320	.0000	-.2350	-.2460	-.2620
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.130	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2410	-.2450	-.2420	-.2370	.0000	-.2390	-.2320	-.2610
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.950	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2380	-.2460	-.2410	-.2360	.0000	-.2420	-.2270	-.2570
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.990	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2420	-.2480	-.2460	-.2410	.0000	-.2440	-.2240	-.2600
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.040	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.2440	-.2460	-.2470	-.2420	.0000	-.2460	-.2130	-.2520
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.290	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1730	-.1770	-.1740	-.1740	.0000	-.1670	-.1810	-.2290
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1730	-.1770	-.1760	-.1760	.0000	-.1690	-.1890	-.2310
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.210	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1780	-.1820	-.1810	-.1810	.0000	-.1750	-.1910	-.2290

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A9B

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AMES 97-707 1A9 OSA + S3 + T9 ORBITER BASE (RBOC25)

SECTION ( 1 ) ORBITER BASE		DEPENDENT VARIABLE CP									
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.140	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1700	-.1030	-.1020	-.1010	.0000	-.1700	-.1060	-.1950
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.990	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1020	-.1070	-.1090	-.1060	.0000	-.1040	-.1970	-.1970
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 0.020	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1770	-.1000	-.1020	-.1790	.0000	-.1700	-.1620	-.1090



DATE: SEP 3

EXTRACTED PRESSURE DATA - 1A98

APPROX 07-007 1A9 02A + S3 + T9 ORBITER BASE

(RBOC26) ( 24 MAY 73 )

PAGE 377

REFERENCE DATA

SREF = 2.4210 SQ. FT. WREF = 28.5300 INCHES  
LREF = 39.8490 INCHES VREF = 10.0000 INCHES  
BREF = 39.8490 INCHES WREF = 10.0000 INCHES  
SCALE = 10.0000 SCALE

PARAMETRIC DATA

ALPHAT = 4.0000 ORBINC = 10.0000  
RUDDER = 15.0000 ELEVON = 0.0000  
RUFLR = 10.0000

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE											
MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.3000	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.2560	-.2620	-.2550	-.2570	.0000	-.2540	-.2570	-.3100
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.2600	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.2470	-.2520	-.2450	-.2450	.0000	-.2440	-.2530	-.2910
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.2200	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.2470	-.2500	-.2420	-.2400	.0000	-.2430	-.2530	-.2680
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.1200	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.2350	-.2400	-.2350	-.2340	.0000	-.2330	-.2230	-.2440
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.9600	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.2500	-.2560	-.2530	-.2490	.0000	-.2540	-.2390	-.2620
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.0000	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.2560	-.2620	-.2600	-.2560	.0000	-.2590	-.2370	-.2640
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.0000	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.2550	-.2580	-.2580	-.2540	.0000	-.2570	-.2230	-.2630
MACH ( 2 ) = 2.0000	BETAT ( 1 ) = -8.2800	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.1780	-.1820	-.1820	-.1810	.0000	-.1760	-.1870	-.2370
MACH ( 2 ) = 2.0000	BETAT ( 2 ) = -6.2300	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.1810	-.1850	-.1860	-.1850	.0000	-.1810	-.1910	-.2380
MACH ( 2 ) = 2.0000	BETAT ( 3 ) = -4.2000	TAP NO	1.0000	2.0000	3.0000	4.0000	5.0000	6.0000	7.0000	8.0000	9.0000
		A	.0000	-.1830	-.1870	-.1870	-.1870	.0000	-.1830	-.1910	-.2340

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE (RBOC26)

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.120	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1810	-.1860	-.1860	.0000	-.1810	-.1920	-.2120	-.2010
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.950	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1930	-.1980	-.1990	.0000	-.1960	-.2040	-.2230	-.2080
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 3.990	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1880	-.1930	-.1920	.0000	-.1890	-.1860	-.2160	-.2000
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 9.030	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1910	-.1960	-.1960	.0000	-.1910	-.1870	-.2080	-.2040

DATE 21 SEP 73

CALCULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 ORA + S3 + T9 ORBITER BASE

(RBOC27) ( 24 MAY 73 )

## PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = 1.000  
RUDDER = 15.000 ELEVON = 1.000  
RUOFLR = 1.000

## REFERENCE DATA

SREF = 2.4210 SQ. INCHES  
LREF = 39.8490 INCHES  
BREF = 39.8490 INCHES  
SCALE = .00100 SCALE

## DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.330	A	.000	-.2630	-.2690	-.2620	.0000	-.2670	-.3160	-.2590	
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270	A	.000	-.2580	-.2610	-.2570	.0000	-.2540	-.3140	-.2850	
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230	A	.000	-.2490	-.2520	-.2460	.0000	-.2480	-.2520	-.2920	-.2730
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110	A	.000	-.2400	-.2440	-.2410	.0000	-.2390	-.2330	-.2520	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990	A	.000	-.2540	-.2580	-.2550	.0000	-.2560	-.2430	-.2670	
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.130	A	.000	-.2590	-.2640	-.2610	.0000	-.2610	-.2370	-.2550	-.2570
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.100	A	.000	-.2590	-.2620	-.2590	.0000	-.2600	-.2310	-.2650	-.2650
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -9.310	A	.000	-.1800	-.1830	-.1850	.0000	-.1720	-.1870	-.2240	-.1950
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250	A	.000	-.1850	-.1890	-.1860	.0000	-.1860	-.1910	-.2440	-.2070
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200	A	.000	-.1860	-.1900	-.1870	.0000	-.1890	-.1930	-.2340	-.2010

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1498

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AMES 97-707 1A9 OEA + S3 + T9 ORBITER BASE

(RBOC27)

SECTION : 1) ORBITER BASE

DEPENDENT VARIABLE CP

MACH (2) = 2.000 BETAT (4) = -.120

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1820	-.1870	-.1870	-.1880	.0200	-.1830	-.1940	-.2150

MACH (2) = 2.000 BETAT (5) = 3.970

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1950	-.2010	-.2020	-.2040	.0200	-.1980	-.2040	-.2230

MACH (2) = 2.000 BETAT (6) = 6.030

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1910	-.1950	-.1960	-.1950	.0200	-.1910	-.1930	-.2210

MACH (2) = 2.000 BETAT (7) = 8.070

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1950	-.2000	-.2010	-.1980	.0200	-.1980	-.1910	-.2160

(RBOX28) ( 24 MAY 73 )

TIME 97-707 1A9 02A + S3 + 19 ORBITER BASE

## DEPENDENT DATA

SPRF = 5.421 INCHES  
 LFER = 39.849 INCHES  
 SPRF = 39.849 INCHES  
 SCALE = 10000 SCALE

## SECTION ( 1 ) ORBITER BASE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.350

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.200

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -2.120

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 0.140

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.155

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.130

MACH ( 2 ) = 2.140 BETAT ( 1 ) = -8.320

MACH ( 2 ) = 2.140 BETAT ( 2 ) = -6.260

MACH ( 2 ) = 2.140 BETAT ( 3 ) = -4.210

## PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = 1.00  
 RUDDER = 15.000 ELEVON = 1.00  
 RUFLR = 1.000

## DEPENDENT VARIABLE CP

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	-.2690	-.2730	-.2690	-.2740	.0000	-.2660	-.2680	-.2620	-.2510
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	-.2680	-.2650	-.2580	-.2580	.0000	-.2590	-.2450	-.2300	-.2280
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	-.2520	-.2560	-.2490	-.2490	.0000	-.2500	-.2520	-.2500	-.2550
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	-.2420	-.2440	-.2440	-.2430	.0000	-.2410	-.2410	-.2400	-.2510
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	-.2560	-.2640	-.2580	-.2530	.0000	-.257	-.2500	-.2720	-.2620
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	-.2630	-.2660	-.2660	-.2680	-.2680	-.2630	-.2440	-.2430	-.2470
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	-.2630	-.2630	-.2650	-.2630	.0000	-.2640	-.2620	-.2680	-.2630
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	-.1820	-.1850	-.1840	-.1830	.0000	-.1790	-.1730	-.2000	-.1980
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	-.1840	-.1890	-.1940	-.1890	.0000	-.1850	-.1800	-.2260	-.2010
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	-.1860	-.1890	-.1920	-.1910	.0000	-.1870	-.1960	-.2310	-.2060

AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE (RBOC28)

## SECTION ( 1 ) ORBITER BASE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.115	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1895	-.1930	-.1940	-.1928	.0000	-.1900	-.2260	-.2040
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.990	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1970	-.2010	-.2030	.0000	-.2000	-.2050	-.2230	-.2120
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.950	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1900	-.1940	-.1970	-.1940	.0000	-.1920	-.1930	-.2150
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.115	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1920	-.1970	-.1990	-.1960	.0000	-.1950	-.1950	-.2040

DATE = SEP 73  
UNITED PRESSURE DATA - 1489  
CROSS 97.7 \* 119.024 + S3 + T9 UPPER MPS NOZZLE

PARAMETRIC DATA

BETAT = .000 ORBINC = .000  
RUDDER = .000 ELEVON = .000  
RUDEFL = .000

REFERENCE DATA

SCRF = 2.4510 SQ INCHES  
LREF = 33.8460 INCHES  
BLCF = 33.8460 INCHES  
SCALE = 1000 SCALE

SECTION ( 1 ) = 1 NOZZLE

MACH ( 1 ) = 1.555 ALPHAT ( 1 ) = -8.120  
X/LNF .250 .500 .750  
PHI

.000  
90.000  
135.000  
180.000  
225.000  
270.000

MACH ( 1 ) = 1.555 ALPHAT ( 1 ) = -6.320  
X/LNF .250 .500 .750  
PHI

.000  
90.000  
135.000  
180.000  
225.000  
270.000

MACH ( 1 ) = 1.555 ALPHAT ( 1 ) = -4.250  
X/LNF .250 .500 .750  
PHI

.000  
90.000  
135.000  
180.000  
225.000  
270.000

MACH ( 1 ) = 1.555 ALPHAT ( 1 ) = -2.190  
X/LNF .250 .500 .750  
PHI

.000  
90.000  
135.000  
180.000  
225.000  
270.000

MACH ( 1 ) = 1.555 ALPHAT ( 1 ) = -.120  
X/LNF .250 .500 .750  
PHI

.000  
90.000  
135.000  
180.000  
225.000

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
ANES 97-707 1A9 ORA + S3 + T9 UPPER MPS NOZZLE

(RBO001)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 ALPHAT( 5 ) = -.120  
X/LNF .250 .500 .750  
PHI  
275.0000 -.2360 -.2350 -.2340

MACH ( 1 ) = 1.555 ALPHAT( 6 ) = 1.950  
X/LNF .250 .500 .750  
PHI  
.0000 -.2270 -.2260  
90.0000 -.2310 -.2290 -.2300  
135.0000 -.2320 -.2440 -.2290  
180.0000 -.0780 -.1500 -.2340  
225.0000 -.0200 -.2400 -.2310  
270.0000 -.2320 -.2290 -.2270

MACH ( 1 ) = 1.555 ALPHAT( 7 ) = 4.000  
X/LNF .250 .500 .750  
PHI  
.0000 -.2250 -.2250  
90.0000 -.2290 -.2280 -.2280  
135.0000 -.2270 -.2350 -.2290  
180.0000 -.1060 -.1820 -.2280  
225.0000 -.2370 -.2350 -.2280  
270.0000 -.2300 -.2270 -.2250

MACH ( 1 ) = 1.555 ALPHAT( 8 ) = 5.000  
X/LNF .250 .500 .750  
PHI  
.0000 -.2280 -.2290  
90.0000 -.2340 -.2310 -.2310  
135.0000 -.2320 -.2390 -.2300  
180.0000 -.1090 -.2020 -.2300  
225.0000 -.2360 -.2350 -.2300  
270.0000 -.2350 -.2320 -.2270

MACH ( 1 ) = 1.555 ALPHAT( 9 ) = 8.000  
X/LNF .250 .500 .750  
PHI  
.0000 -.2270 -.2280  
90.0000 -.2330 -.2310 -.2290  
135.0000 -.2310 -.2350 -.2300  
180.0000 -.1080 -.2200 -.2290  
225.0000 -.2350 -.2300 -.2290  
270.0000 -.2340 -.2300 -.2260

MACH ( 2 ) = 2.000 ALPHAT( 1 ) = -8.360  
X/LNF .250 .500 .750  
PHI  
.0000 -.1540 -.1550  
90.0000 -.1560 -.1540 -.1550  
135.0000 -.2210 -.1610 -.1730  
180.0000 -.1570 -.1460 -.1610  
225.0000 -.1990 -.1600 -.1670



DATE 20 SEP 72

COMPUTED PRESSURE DATA - 1A98  
 ANGE 97-707 1A9 C2A + S3 + 79 UPPER MPS NOZZLE  
 (RBO001)

SECTION ( 1 ) MPS N 70

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.1000 ALPHAT( 1 ) = -0.360  
 X/LNF .250 .500 .750  
 PHI 270.000 -0.1550 -0.1560 -0.1520

MACH ( 2 ) = 2.1000 ALPHAT( 2 ) = -0.310  
 X/LNF .250 .500 .750  
 PHI 90.000 -0.1620 -0.1630  
 90.000 -0.1630 -0.1630  
 135.000 -0.1690 -0.1800  
 180.000 .0300 -0.1680  
 225.000 -0.1760 -0.1730  
 270.000 -0.1630 -0.1590

MACH ( 2 ) = 2.1000 ALPHAT( 3 ) = -0.250  
 X/LNF .250 .500 .750  
 PHI 90.000 -0.1680 -0.1670  
 90.000 -0.1680 -0.1670  
 135.000 -0.1760 -0.1830  
 180.000 .0900 -0.1740  
 225.000 -0.1800 -0.1770  
 270.000 -0.1690 -0.1680

MACH ( 2 ) = 2.1000 ALPHAT( 4 ) = -0.210  
 X/LNF .250 .500 .750  
 PHI 90.000 -0.1720 -0.1730  
 90.000 -0.1750 -0.1740  
 135.000 -0.2210 -0.1820  
 180.000 .0650 .0260  
 225.000 -0.2030 -0.1890  
 270.000 -0.1750 -0.1740

MACH ( 2 ) = 2.1000 ALPHAT( 5 ) = -0.160  
 X/LNF .250 .500 .750  
 PHI 90.000 -0.1750 -0.1760  
 90.000 -0.1770 -0.1760  
 135.000 -0.2170 -0.1870  
 180.000 .0480 .0400  
 225.000 -0.2020 -0.1920  
 270.000 -0.1790 -0.1760

MACH ( 2 ) = 2.1000 ALPHAT( 6 ) = 1.890  
 X/LNF .250 .500 .750  
 PHI 90.000 -0.1780 -0.1790  
 90.000 -0.1800 -0.1790  
 135.000 -0.2090 -0.1870  
 180.000 .0300 -0.0140  
 225.000 -0.2030 -0.1960  
 270.000 -0.1910 -0.1910

AMES 97-757 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RSC0013)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.1440 ALPHAT( 6 ) = 1.890

X/LNP	.250	.500	.750
PHI			
270.000	-.1810	-.1780	-.1760

MACH ( 2 ) = 2.1440 ALPHAT( 7 ) = 3.930

X/LNP	.250	.500	.750
PHI			
.000	-.1780	-.1810	
90.000	-.1830	-.1810	-.1800
135.000	-.1970	-.1890	-.1920
180.000	-.0220	-.0330	-.1940
225.000	-.2030	-.1960	-.1860
270.000	-.1830	-.1820	-.1780

MACH ( 2 ) = 2.1440 ALPHAT( 8 ) = 5.980

X/LNP	.250	.500	.750
PHI			
.000	-.1790	-.1820	
90.000	-.1830	-.1820	-.1830
135.000	-.1930	-.1850	-.1920
180.000	-.0030	-.0750	-.1920
225.000	-.2060	-.1990	-.1860
270.000	-.1840	-.1840	-.1800

MACH ( 2 ) = 2.1440 ALPHAT( 9 ) = 8.020

X/LNP	.250	.500	.750
PHI			
.000	-.1850	-.1850	
90.000	-.1860	-.1860	-.1850
135.000	-.1980	-.1850	-.1940
180.000	-.0250	-.0940	-.1950
225.000	-.2080	-.2010	-.1890
270.000	-.1860	-.1870	-.1830

TABULATED PRESSURE DATA - 1498

DATE 21 SEP 73

(RBOON2) ( 24 MAY 73 )

AVES 97-757 1A9 C8A + S3 + 19 UPPER MPS NOZZLE

PARAMETRIC DATA

ALPHAT = 8.0000 ORBINC = .5000  
 RUDDER = .0000 ELEVON = .0000  
 RUFLR = .0000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 28.5300 INCHES  
 LREF = 39.8490 INCHES YREF = .0000 INCHES  
 BREF = 39.8490 INCHES ZREF = .0000 INCHES  
 SCALE = .0000 SC.FT.

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.140

X/LNP	.250	.500	.750
PHI	-.2550	-.2590	-.2630
90.000	-.2630	-.2680	-.2630
135.000	-.2810	-.2660	-.2630
180.000	-.1580	-.2110	-.2640
225.000	-.2800	-.2640	-.2630
270.000	-.2670	-.2640	-.2600

MACH ( 2 ) = 1.555 BETAT ( 2 ) = -5.100

X/LNP	.250	.500	.750
PHI	-.2420	-.2460	-.2460
90.000	-.2500	-.2470	-.2460
135.000	-.2580	-.2600	-.2450
180.000	-.1940	-.1570	-.2580
225.000	-.2610	-.2600	-.2510
270.000	-.2520	-.2500	-.2490

MACH ( 3 ) = 1.555 BETAT ( 3 ) = -3.050

X/LNP	.250	.500	.750
PHI	-.2380	-.2410	-.2390
90.000	-.2470	-.2420	-.2390
135.000	-.2560	-.2470	-.2400
180.000	-.1180	-.2160	-.2400
225.000	-.2570	-.2480	-.2410
270.000	-.2450	-.2420	-.2390

MACH ( 4 ) = 1.555 BETAT ( 4 ) = 5.110

X/LNP	.250	.500	.750
PHI	-.2460	-.2470	-.2520
90.000	-.2550	-.2520	-.2520
135.000	-.2680	-.2600	-.2520
180.000	-.1540	-.1660	-.2550
225.000	-.2770	-.2580	-.2500
270.000	-.2500	-.2470	-.2470

MACH ( 5 ) = 1.555 BETAT ( 5 ) = 7.140

X/LNP	.250	.500	.750
PHI	-.2560	-.2580	-.2620
90.000	-.2670	-.2630	-.2620
135.000	-.2840	-.2670	-.2610
180.000	-.1810	-.1650	-.2700
225.000	-.2900	-.2630	-.2630

DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A98

AMES 97-757 1A9 Q2A + S3 + T9 UPPER MPS NOZZLE

(R80052)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.140	X/LNP	.250	.500
	PHI		.750
	270.000	-.2600	-.2560
	X/LNP	.250	.500
	PHI		.750
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.190	.000	-.2600	-.2610
	90.000	-.2780	-.2710
	135.000	-.2880	-.2720
	180.000	-.1800	-.1340
	225.000	-.2990	-.2720
	270.000	-.2670	-.2670
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.320	X/LNP	.250	.500
	PHI		.750
	.000	-.1800	-.1810
	90.000	-.1940	-.1890
	135.000	-.1930	-.1840
	180.000	-.1490	-.0840
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -5.270	225.000	-.2030	-.1930
	270.000	-.1890	-.1840
	X/LNP	.250	.500
	PHI		.750
	.000	-.1860	-.1860
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210	90.000	-.1960	-.1890
	135.000	-.2070	-.1820
	180.000	-.1140	-.0680
	225.000	-.2020	-.2000
	270.000	-.1890	-.1870
MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.990	X/LNP	.250	.500
	PHI		.750
	.000	-.1870	-.1880
	90.000	-.1930	-.1890
	135.000	-.1990	-.1970
	180.000	-.0660	-.0720
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 7.140	225.000	-.2030	-.2010
	270.000	-.1910	-.1940
	X/LNP	.250	.500
	PHI		.750
	.000	-.1930	-.1940
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 9.190	90.000	-.1990	-.1970
	135.000	-.2180	-.2080
	180.000	-.1030	-.0530
	225.000	-.2240	-.2170
	270.000	-.2170	-.2130

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 ANES 97-707 1A3 02A + S3 + T9 UPPER MPS NOZZLE (RBC002)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.1440 BETAT ( 4 ) = 3.990	X/LNP	.250	.500 .750
	PHI		
	270.000	-.2010	-.1970 -.1920
MACH ( 2 ) = 2.1440 BETAT ( 5 ) = 6.160	X/LNP	.250	.500 .750
	PHI		
	.140	-.1870	-.1890
	90.100	-.1930	-.1920 -.1930
	135.140	-.2070	-.2040 -.1930
	180.140	-.1380	.1410 -.2120
	225.140	-.2230	-.1860 -.1940
	270.140	-.1990	-.1920 -.1850
MACH ( 2 ) = 2.1440 BETAT ( 6 ) = 8.120	X/LNP	.250	.500 .750
	PHI		
	.140	-.1930	-.1940
	90.100	-.2110	-.2020 -.2000
	135.140	-.2190	-.2010 -.2010
	180.140	-.1890	-.1830 -.2190
	225.140	-.2240	-.1950 -.2120
	270.140	-.2050	-.1970 -.1940

DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 OCA + S3 + T9 UPPER MPS NOZZLE

(RBO013) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.3300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0020 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0020 INCHES  
 SCALE = .0314 SCALE

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.120  
 X/LNP .250 .500 .750  
 PHI  
 .000 -2530 -2570  
 90.000 -2590 -2560 -2600  
 135.000 -2790 -2600 -2600  
 180.000 -1630 -2010 -2610  
 225.000 -2800 -2670 -2590  
 270.000 -2620 -2600 -2570

MACH ( 2 ) = 1.555 BETAT ( 2 ) = -5.070

X/LNP .250 .500 .750  
 PHI  
 .000 -2410 -2430  
 90.000 -2470 -2430 -2430  
 135.000 -2680 -2620 -2440  
 180.000 -1070 -1610 -2540  
 225.000 -2620 -2600 -2480  
 270.000 -2490 -2460 -2450

MACH ( 3 ) = 1.555 BETAT ( 3 ) = -3.050

X/LNP .250 .500 .750  
 PHI  
 .000 -2360 -2380  
 90.000 -2440 -2440 -2370  
 135.000 -2540 -2440 -2360  
 180.000 -1110 -2180 -2360  
 225.000 -2530 -2440 -2410  
 270.000 -2420 -2410 -2390

MACH ( 4 ) = 1.555 BETAT ( 4 ) = 5.080

X/LNP .250 .500 .750  
 PHI  
 .000 -2410 -2430  
 90.000 -2480 -2460 -2470  
 135.000 -2640 -2590 -2460  
 180.000 -1090 -1650 -2470  
 225.000 -2730 -2570 -2460  
 270.000 -2450 -2420 -2410

MACH ( 5 ) = 1.555 BETAT ( 5 ) = 7.110

X/LNP .250 .500 .750  
 PHI  
 .000 -2510 -2540  
 90.000 -2620 -2610 -2530  
 135.000 -2790 -2690 -2540  
 180.000 -1510 -1210 -2650  
 225.000 -2680 -2690 -2610

## PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .000  
 RUDDER = .000 ELEVON = .000  
 RUFLR = .000

DATE 21 SEP 73  
 COMPUTED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(R00013)

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 3 ) = 7.115  
 X/LNF .250 .500 .750  
 PHI 270.000 -2.530 -2.520 -2.510

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 3.140  
 X/LNF .250 .500 .750  
 PHI 0.000 -2.560 -2.580  
 90.000 -2.740 -2.680 -2.670  
 135.000 -2.860 -2.770 -2.650  
 180.000 -2.130 -2.020 -2.660  
 225.000 -2.290 -2.730 -2.680  
 270.000 -2.600 -2.590 -2.570

MACH ( 2 ) = 2.100 BETAT ( 3 ) = -8.300  
 X/LNF .250 .500 .750  
 PHI 0.000 -2.180 -2.180  
 90.000 -2.190 -2.180 -2.180  
 135.000 -2.190 -2.180 -2.180  
 180.000 -2.190 -2.180 -2.180  
 225.000 -2.190 -2.180 -2.180  
 270.000 -2.190 -2.180 -2.180

MACH ( 2 ) = 2.100 BETAT ( 2 ) = -6.250  
 X/LNF .250 .500 .750  
 PHI 0.000 -2.180 -2.180  
 90.000 -2.190 -2.180 -2.180  
 135.000 -2.190 -2.180 -2.180  
 180.000 -2.190 -2.180 -2.180  
 225.000 -2.190 -2.180 -2.180  
 270.000 -2.190 -2.180 -2.180

MACH ( 2 ) = 2.100 BETAT ( 3 ) = -4.200  
 X/LNF .250 .500 .750  
 PHI 0.000 -2.180 -2.180  
 90.000 -2.190 -2.180 -2.180  
 135.000 -2.190 -2.180 -2.180  
 180.000 -2.190 -2.180 -2.180  
 225.000 -2.190 -2.180 -2.180  
 270.000 -2.190 -2.180 -2.180

MACH ( 2 ) = 2.100 BETAT ( 4 ) = 3.970  
 X/LNF .250 .500 .750  
 PHI 0.000 -2.180 -2.180  
 90.000 -2.190 -2.180 -2.180  
 135.000 -2.190 -2.180 -2.180  
 180.000 -2.190 -2.180 -2.180  
 225.000 -2.190 -2.180 -2.180  
 270.000 -2.190 -2.180 -2.180

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 OSA + S3 + T9 UPPER MPS NOZZLE

(RBO003)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.970	X/LNP	.250	.500 .750
	PHI		
	270.000	-.1960	-.1930 -.1910
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 6.030	X/LNP	.250	.500 .750
	PHI		
	.000	-.1870	-.1890
	90.000	-.1920	-.1910 -.1930
	135.000	-.2080	-.2060 -.1940
	180.000	-.1230	.0120 -.2030
	225.000	-.2290	-.1890 -.2010
	270.000	-.1950	-.1910 -.1850
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.080	X/LNP	.250	.500 .750
	PHI		
	.000	-.1930	-.1930
	90.000	-.1990	-.1970 -.1980
	135.000	-.2110	-.2100 -.1990
	180.000	-.1460	-.1210 -.2080
	225.000	-.2240	-.1990 -.2050
	270.000	-.2020	-.1970 -.1910



DATE 21 SEP 73

TABULATED PRESSURE DATA - 1498

AMES 97-707 1A9 Q2A + S3 + T9 UPPER MPS NOZZLE

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(RBOC04) ( 24 MAY 73 )

REFERENT DATA

SREF = 2.4210 SQ. FT. XREF = 28.5300 INCHES  
 LREF = 39.8490 INCHES YREF = .0000 INCHES  
 BREF = 39.8490 INCHES ZREF = .0000 INCHES  
 SCALE = .0000 SCALE

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.090

DEPENDENT VARIABLE CP

X/LNP .250 .500 .750  
 PHI

.000 -.2470 -.2490  
 90.000 -.2510 -.2490 -.2520  
 135.000 -.2840 -.2720 -.2530  
 180.000 -.1170 -.1910 -.2620  
 225.000 -.2730 -.2680 -.2540  
 270.000 -.2550 -.2520 -.2510

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070

X/LNP .250 .500 .750  
 PHI  
 .000 -.2400 -.2400  
 90.000 -.2440 -.2400 -.2420  
 135.000 -.2700 -.2590 -.2420  
 180.000 -.1600 -.1610 -.2520  
 225.000 -.2620 -.2590 -.2460  
 270.000 -.2460 -.2430 -.2430

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.040

X/LNP .250 .500 .750  
 PHI  
 .000 -.2360 -.2380  
 90.000 -.2410 -.2380 -.2380  
 135.000 -.2550 -.2480 -.2380  
 180.000 -.1980 -.2210 -.2380  
 225.000 -.2530 -.2490 -.2410  
 270.000 -.2430 -.2400 -.2390

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.060

X/LNP .250 .500 .750  
 PHI  
 .000 -.2410 -.2410  
 90.000 -.2490 -.2470 -.2460  
 135.000 -.2670 -.2630 -.2480  
 180.000 -.1640 -.1150 -.2480  
 225.000 -.2780 -.2640 -.2450  
 270.000 -.2420 -.2400 -.2390

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.080

X/LNP .250 .500 .750  
 PHI  
 .000 -.2480 -.2490  
 90.000 -.2560 -.2540 -.2550  
 135.000 -.2730 -.2690 -.2550  
 180.000 -.1080 -.0700 -.2650  
 225.000 -.2900 -.2700 -.2540

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUFTLR = .000

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-72 A9 O2A + S3 + T9 UPPER WFS NOZZLE (R800714)

SECTION ( 1 ) WFS NOZZLE		DEPENDENT VARIABLE CP				
MACH ( 1 ) = 1.955	BETAT ( 5 ) = 7.080	X/LNF	.250	.500	.750	
		PHI				
		270.000	-.2490	-.2470	-.2460	
MACH ( 1 ) = 1.955	BETAT ( 6 ) = 9.100	X/LNF	.250	.500	.750	
		PHI				
		.000	-.2530	-.2550		
		90.000	-.2730	-.2660	-.2630	
		135.000	-.2820	-.2710	-.2640	
		180.000	-.1130	-.0610	-.2660	
		225.000	-.3010	-.2790	-.2640	
		270.000	-.2560	-.2520	-.2520	
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -3.270	X/LNF	.250	.500	.750	
		PHI				
		.000	-.1780	-.1790		
		90.000	-.1890	-.1830	-.1840	
		135.000	-.1890	-.1820	-.1880	
		180.000	-.1210	-.1020	-.1960	
		225.000	-.2140	-.1940	-.1830	
		270.000	-.1860	-.1830	-.1840	
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.240	X/LNF	.250	.500	.750	
		PHI				
		.000	-.1820	-.1840		
		90.000	-.1860	-.1840	-.1890	
		135.000	-.2170	-.1940	-.1890	
		180.000	-.1940	-.1420	-.1920	
		225.000	-.2070	-.2140	-.1880	
		270.000	-.1890	-.1860	-.1830	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.210	X/LNF	.250	.500	.750	
		PHI				
		.000	-.1840	-.1850		
		90.000	-.1880	-.1860	-.1860	
		135.000	-.2280	-.2140	-.1910	
		180.000	-.1140	-.1390	-.2120	
		225.000	-.2110	-.1950	-.1960	
		270.000	-.1890	-.1880	-.1840	
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.950	X/LNF	.250	.500	.750	
		PHI				
		.000	-.1860	-.1880		
		90.000	-.1940	-.1910	-.1920	
		135.000	-.2220	-.1960	-.1950	
		180.000	-.1030	-.1350	-.2120	
		225.000	-.2320	-.2120	-.1960	

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 OEA + S3 + T9 UPPER MPS NOZZLE

(RBOCJ4)

SECTION ( 3 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.950	X/LNF	.250	.500 .750
	PHI		
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.990	X/LNF	.250	.500 .750
	PHI		
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.030	X/LNF	.250	.500 .750
	PHI		

270.000	-.1920	-.1900	-.1840
90.000	-.1860	-.1870	
90.000	-.1890	-.1890	-.1920
135.000	-.2060	-.2040	-.1920
180.000	-.1880	.0260	-.1810
225.000	-.2290	-.1890	-.1980
270.000	-.1910	-.1870	-.1820
90.000	-.1900	-.1910	
90.000	-.1990	-.1960	-.1960
135.000	-.2140	-.2070	-.1970
180.000	-.1240	-.1030	-.2090
225.000	-.2150	-.2110	-.2060
270.000	-.2030	-.1960	-.1870

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBCD-5) ( 24 MAY 73 )

AMES 97-707 1A9 OEA + S3 + T9 UPPER MPS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 2.1400 ORBINC = .500  
 RUDDER = .0000 ELEVON = .000  
 RUDDLR = .0000

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.100

X/LNP	.250	.500	.750
PHI			
.000	-.2450	-.2460	
90.000	-.2470	-.2450	-.2490
135.000	-.2860	-.2710	-.2490
180.000	-.1840	-.1690	-.2620
225.000	-.2740	-.2650	-.2530
270.000	-.2520	-.2500	-.2500

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070

X/LNP	.250	.500	.750
PHI			
.000	-.2400	-.2410	
90.000	-.2410	-.2410	-.2430
135.000	-.2730	-.2570	-.2450
180.000	-.1630	-.1370	-.2540
225.000	-.2620	-.2640	-.2470
270.000	-.2470	-.2450	-.2430

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050

X/LNP	.250	.500	.750
PHI			
.000	-.2330	-.2360	
90.000	-.2380	-.2360	-.2350
135.000	-.2530	-.2440	-.2360
180.000	-.1840	-.1950	-.2370
225.000	-.2540	-.2480	-.2380
270.000	-.2410	-.2380	-.2370

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.050

X/LNP	.250	.500	.750
PHI			
.000	-.2390	-.2390	
90.000	-.2460	-.2430	-.2450
135.000	-.2670	-.2610	-.2450
180.000	-.1820	-.1140	-.2530
225.000	-.2790	-.2590	-.2440
270.000	-.2400	-.2370	-.2360

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.070

X/LNP	.250	.500	.750
PHI			
.000	-.2410	-.2420	
90.000	-.2500	-.2430	-.2490
135.000	-.2730	-.2630	-.2490
180.000	-.1920	-.1600	-.2550
225.000	-.2860	-.2640	-.2470

(RBDJUS)

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 ARES 97-7J7 1A9 02A + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.177J	X/LNF	.25J	.50J .75J
	PHI		
	27J.00J	-.242J	-.239J -.238J
	X/LNF	.25J	.50J .75J
	PHI		
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.099J	.00J	-.254J	-.255J
	9J.00J	-.266J	-.261J -.262J
	135.00J	-.281J	-.273J -.261J
	18J.00J	-.469J	-.4J9J -.27J
	225.00J	-.3J6J	-.282J -.257J
MACH ( 2 ) = 2.00J BETAT ( 1 ) = -8.28J	27J.00J	-.255J	-.246J -.245J
	X/LNF	.25J	.50J .75J
	PHI		
	.00J	-.173J	-.175J
	9J.00J	-.18J	-.178J -.18J
MACH ( 2 ) = 2.00J BETAT ( 2 ) = -6.25J	135.00J	-.199J	-.182J -.183J
	18J.00J	-.J95J	.J14J -.191J
	225.00J	-.197J	-.184J -.179J
	27J.00J	-.184J	-.18J -.176J
	X/LNF	.25J	.5J .75J
MACH ( 2 ) = 2.00J BETAT ( 3 ) = -4.14J	PHI		
	.00J	-.178J	-.178J
	9J.00J	-.18J	-.177J -.177J
	135.00J	-.21J	-.187J -.183J
	18J.00J	-.J56J	.J17J -.191J
MACH ( 2 ) = 2.00J BETAT ( 4 ) = 3.94J	225.00J	-.2J5J	-.195J -.181J
	27J.00J	-.183J	-.18J -.178J
	X/LNF	.25J	.5J .75J
	PHI		
	.00J	-.179J	-.181J
MACH ( 2 ) = 2.00J BETAT ( 5 ) = 3.94J	9J.00J	-.183J	-.181J -.181J
	135.00J	-.21J	-.19J -.185J
	18J.00J	-.J42J	-.J18J -.196J
	225.00J	-.2J6J	-.196J -.188J
	27J.00J	-.185J	-.183J -.18J
MACH ( 2 ) = 2.00J BETAT ( 6 ) = 3.94J	X/LNF	.25J	.5J .75J
	PHI		
	.00J	-.187J	-.188J
	9J.00J	-.194J	-.191J -.192J
	135.00J	-.226J	-.195J -.195J
MACH ( 2 ) = 2.00J BETAT ( 7 ) = 3.94J	18J.00J	-.J28J	.J17J -.2J3J
	225.00J	-.222J	-.2J4J -.199J
	27J.00J	-.185J	-.183J -.18J

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
ANES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RECORDS)

SECTION ( 1 ) MPS NOZZLE	DEPENDENT VARIABLE ( P			
MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.940	X/LNP	.250	.500	.750
	PHI			
	270.000	-.1920	-.1880	-.1840
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.980	X/LNP	.250	.500	.750
	PHI			
	.000	-.1810	-.1820	
	90.000	-.1870	-.1850	-.1860
	135.000	-.2090	-.2030	-.1880
	180.000	-.1680	-.1530	-.1730
	225.000	-.2240	-.1870	-.1980
	270.000	-.1880	-.1840	-.1730
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 9.020	X/LNP	.250	.500	.750
	PHI			
	.000	-.1830	-.1840	
	90.000	-.1940	-.1920	-.1910
	135.000	-.2110	-.1980	-.1920
	180.000	-.1480	-.1720	-.1650
	225.000	-.2160	-.1950	-.1920
	270.000	-.1940	-.1920	-.1830

(R00006) ( 24 MAY 73 )

DATE 21 SEP 73 INSULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 OCA + S3 + T9 UPPER MPS NOZZLE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500  
RUDDER = .000 ELEVON = .000  
RUOFLR = .000

REFERENCE DATA

SREF = 8.4210 SQ.FT. XGRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YGRP = .0000 INCHES  
BREF = 39.8490 INCHES ZGRP = .0000 INCHES  
SCALE = .0310 SCALE

DEPENDENT VARIABLE CP

SECTION: 4 ( 1 ) MPS NOZZLE  
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.100

X/LNP	.250	.500	.750
PHI	.000	-.2360	-.2380
90.000	-.2390	-.2380	-.2410
135.000	-.2810	-.2560	-.2410
180.000	-.0510	-.0740	-.2540
225.000	-.2630	-.2630	-.2440
270.000	-.2440	-.2410	-.2410

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.080

X/LNP	.250	.500	.750
PHI	.000	-.2370	-.2350
90.000	-.2360	-.2360	-.2380
135.000	-.2680	-.2490	-.2390
180.000	-.0740	-.0920	-.2510
225.000	-.2590	-.2560	-.2420
270.000	-.2440	-.2440	-.2440

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.060

X/LNP	.250	.500	.750
PHI	.000	-.2360	-.2380
90.000	-.2380	-.2370	-.2380
135.000	-.2610	-.2450	-.2380
180.000	-.0720	-.1460	-.2430
225.000	-.2570	-.2510	-.2420
270.000	-.2430	-.2410	-.2390

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.050

X/LNP	.250	.500	.750
PHI	.000	-.2350	-.2350
90.000	-.2450	-.2410	-.2430
135.000	-.2590	-.2630	-.2430
180.000	-.0860	-.1480	-.2540
225.000	-.2810	-.2540	-.2450
270.000	-.2360	-.2340	-.2330

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.060

X/LNP	.250	.500	.750
PHI	.000	-.2350	-.2380
90.000	-.2460	-.2430	-.2450
135.000	-.2650	-.2630	-.2440
180.000	-.0770	-.0120	-.2570
225.000	-.2860	-.2570	-.2440

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE (RBC00'6)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.060	X/LNF	.250	.500 .750
	PHI		
	270.000	-.2380	-.2350 -.2330
	X/LNF	.250	.500 .750
	PHI		
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.090	.000	-.2440	-.2460
	90.000	-.2580	-.2540 -.2520
	135.000	-.2700	-.2690 -.2530
	180.000	-.0330	.0110 -.2660
	225.000	-.2970	-.2720 -.2540
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.250	270.000	-.2470	-.2400 -.2370
	X/LNF	.250	.500 .750
	PHI		
	.000	-.1700	-.1710
	90.000	-.1740	-.1720 -.1740
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250	135.000	-.1980	-.1840 -.1780
	180.000	-.0730	.0460 -.1890
	225.000	-.1910	-.1870 -.1740
	270.000	-.1780	-.1750 -.1710
	X/LNF	.250	.500 .750
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -6.130	PHI		
	.000	-.1740	-.1760
	90.000	-.1800	-.1750 -.1740
	135.000	-.1930	-.1810 -.1840
	180.000	-.0370	.0310 -.1910
MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.990	225.000	-.2150	-.1990 -.1790
	270.000	-.1820	-.1840 -.1750
	X/LNF	.250	.500 .750
	PHI		
	.000	-.1730	-.1750
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990	90.000	-.1800	-.1780 -.1770
	135.000	-.2150	-.1870 -.1920
	180.000	.0280	.0440 -.1880
	225.000	-.2070	-.1940 -.1820
	270.000	-.1790	-.1770 -.1730
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 3.990	X/LNF	.250	.500 .750
	PHI		
	.000	-.1810	-.1820
	90.000	-.1860	-.1820 -.1820
	135.000	-.2190	-.1940 -.1920
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 3.990	180.000	-.0180	.0330 -.1960
	225.000	-.2140	-.1970 -.1910
	X/LNF	.250	.500 .750
	PHI		
	.000	-.1810	-.1820



(R80046)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 O2A + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.0000 BETAT ( 4 ) = 3.950	X/LNP	.250	.500
	PHI		
	270.000	-.1860	-.1810
MACH ( 2 ) = 2.0000 BETAT ( 5 ) = 5.980	X/LNP	.250	.500
	PHI		
	.000	-.1770	-.1780
	90.000	-.1820	-.1800
	135.000	-.2040	-.2010
	180.000	-.0510	.0970
	225.000	-.2140	-.1820
	270.000	-.1830	-.1780
			-.1730

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBO007) ( 24 MAY 73 )

AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

PARAMETRIC DATA

ALPHAT = -2.000 ORBINC = .500  
RUDDER = .000 ELEVON = .000  
RUDDER = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0000 SCALE

SECTION ( 1 ) MPS NOZZLE

		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.110	X/LNP	.750
		PHI	
		.000	-.2330
		90.000	-.2340
		135.000	-.2379
		180.000	-.2540
		225.000	-.2680
		270.000	-.2400

SECTION ( 2 ) MPS NOZZLE

		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -3.080	X/LNP	.750
		PHI	
		.000	-.2330
		90.000	-.2340
		135.000	-.2460
		180.000	-.1920
		225.000	-.2560
		270.000	-.2360

SECTION ( 3 ) MPS NOZZLE

		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.070	X/LNP	.750
		PHI	
		.000	-.2310
		90.000	-.2330
		135.000	-.2410
		180.000	-.1230
		225.000	-.2470
		270.000	-.2360

SECTION ( 4 ) MPS NOZZLE

		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.040	X/LNP	.750
		PHI	
		.000	-.2270
		90.000	-.2380
		135.000	-.2590
		180.000	-.1470
		225.000	-.2460
		270.000	-.2280

SECTION ( 5 ) MPS NOZZLE

		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.060	X/LNP	.750
		PHI	
		.000	-.2270
		90.000	-.2410
		135.000	-.2690
		180.000	-.1620
		225.000	-.2520
		270.000	-.2470

DATE 21 SEP 73

ABULATED PRESSURE DATA - 1A98

AMES 97-7J7 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RBC0577)

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.955 BETAT ( 5 ) = 7.060  
X/LNP .250 .500 .750  
PHI 270.000 -.2320 -.2280 -.2260

MACH ( 1 ) = 1.955 BETAT ( 6 ) = 9.080  
X/LNP .250 .500 .750  
PHI .000 -.2290 -.2310  
90.000 -.2410 -.2370 -.2390  
135.000 -.2570 -.2590 -.2380  
180.000 -.0390 .0400 -.2520  
225.000 -.2970 -.2540 -.2380  
270.000 -.2330 -.2260 -.2220

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.310

X/LNP .250 .500 .750  
PHI .000 -.1650 -.1680  
90.000 -.1700 -.1690 -.1670  
135.000 -.1680 -.1650 -.1720  
180.000 -.0340 .1160 -.1860  
225.000 -.1920 -.1900 -.1710  
270.000 -.1730 -.1700 -.1670

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260

X/LNP .250 .500 .750  
PHI .000 -.1720 -.1750  
90.000 -.1790 -.1730 -.1710  
135.000 -.1760 -.1750 -.1780  
180.000 -.0200 .0410 -.1880  
225.000 -.2160 -.1950 -.1790  
270.000 -.1820 -.1770 -.1730

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230

X/LNP .250 .500 .750  
PHI .000 -.1770 -.1790  
90.000 -.1810 -.1780 -.1770  
135.000 -.2120 -.1860 -.1830  
180.000 .0640 .0360 -.1910  
225.000 -.2180 -.1890 -.1930  
270.000 -.1820 -.1810 -.1770

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.940

X/LNP .250 .500 .750  
PHI .000 -.1760 -.1790  
90.000 -.1850 -.1810 -.1840  
135.000 -.2220 -.1910 -.1920  
180.000 .0480 .0530 -.1920  
225.000 -.2160 -.1940 -.1940

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 CSA + S3 + T9 UPPER MPS NOZZLE

(R800077)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.940  
 X/LNP .250 .500 .750  
 PHI  
 270.000 -.1840 -.1800 -.1730

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.970  
 X/LNP .250 .500 .750  
 PHI

.000 -.1720 -.1760  
 90.000 -.1810 -.1770 -.1780  
 135.000 -.2110 -.1980 -.1810  
 180.000 -.0030 .0670 -.1930  
 225.000 -.1980 -.1930 -.1930  
 270.000 -.1830 -.1750 -.1710

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.010

X/LNP .250 .500 .750  
 PHI  
 .000 -.1730 -.1760  
 90.000 -.1800 -.1780 -.1790  
 135.000 -.2010 -.2040 -.1810  
 180.000 .0460 .1330 -.1960  
 225.000 -.1840 -.1850 -.1970  
 270.000 -.1820 -.1750 -.1710

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 O2A - S3 + T9 UPPER MPS NOZZLE

PAGE 403

(RBC008) ( 24 MAR 73 )

# REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.3300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0310 SCALE

## SECTION ( 1 ) MPS NOZZLE

### DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.130

X/LNP	.250	.500	.750
PHI			
.000	-.2280	-.2270	
90.000	-.2270	-.2220	-.2280
135.000	-.2730	-.2360	-.2380
180.000	-.1180	-.0170	-.2450
225.000	-.2670	-.2490	-.2320
270.000	-.2380	-.2340	-.2310

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.150

X/LNP	.250	.500	.750
PHI			
.000	-.2240	-.2230	
90.000	-.2250	-.2230	-.2250
135.000	-.2740	-.2350	-.2410
180.000	-.1670	-.0720	-.2400
225.000	-.2550	-.2450	-.2280
270.000	-.2330	-.2290	-.2270

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.070

X/LNP	.250	.500	.750
PHI			
.000	-.2280	-.2280	
90.000	-.2360	-.2310	-.2300
135.000	-.2590	-.2360	-.2400
180.000	-.0350	-.0800	-.2400
225.000	-.2490	-.2460	-.2330
270.000	-.2340	-.2310	-.2300

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.030

X/LNP	.250	.500	.750
PHI			
.000	-.2210	-.2210	
90.000	-.2310	-.2280	-.2270
135.000	-.2470	-.2510	-.2280
180.000	-.1830	-.0130	-.2410
225.000	-.2760	-.2420	-.2390
270.000	-.2240	-.2220	-.2220

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.050

X/LNP	.250	.500	.750
PHI			
.000	-.2220	-.2220	
90.000	-.2340	-.2310	-.2290
135.000	-.2680	-.2500	-.2290
180.000	-.0590	-.0320	-.2450
225.000	-.2780	-.2410	-.2430

# PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUDDFLR = .000

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-7J7 1A9 O2A + S3 + T9 UPPER MPS NOZZLE

(RB0008)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP				
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.050	X/LNP	.250	.500	.750	
		PHI				
		270.000	-.2270	-.2230	-.2220	
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.070	X/LNP	.250	.500	.750	
		PHI				
		.000	-.2210	-.2220		
		90.000	-.2360	-.2310	-.2310	
		135.000	-.2550	-.2540	-.2310	
		180.000	-.0240	.0470	-.2450	
		225.000	-.2890	-.2460	-.2360	
		270.000	-.2260	-.2210	-.2150	
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.310	X/LNP	.250	.500	.750	
		PHI				
		.000	-.1620	-.1650		
		90.000	-.1710	-.1640	-.1600	
		135.000	-.1350	-.1470	-.1680	
		180.000	.0440	.0840	-.1830	
		225.000	-.2110	-.1940	-.1700	
		270.000	-.1740	-.1670	-.1650	
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	X/LNP	.250	.500	.750	
		PHI				
		.000	-.1680	-.1720		
		90.000	-.1760	-.1710	-.1660	
		135.000	-.1610	-.1730	-.1750	
		180.000	.0230	.0350	-.1850	
		225.000	-.2180	-.1830	-.1870	
		270.000	-.1780	-.1740	-.1680	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.230	X/LNP	.250	.500	.750	
		PHI				
		.000	-.1680	-.1710		
		90.000	-.1760	-.1720	-.1680	
		135.000	-.1870	-.1810	-.1760	
		180.000	.0980	.0270	-.1830	
		225.000	-.2140	-.1780	-.1860	
		270.000	-.1760	-.1750	-.1680	
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.920	X/LNP	.250	.500	.750	
		PHI				
		.000	-.1730	-.1760		
		90.000	-.1820	-.1780	-.1750	
		135.000	-.2210	-.1890	-.1920	
		180.000	.0450	.0270	-.1850	
		225.000	-.2140	-.1920	-.1890	

(RBC004)

DATE 21 SEP 1968

CALCULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 OCA + S3 + T9 UPPER WFS NOZZLE

DEPENDENT VARIABLE CP

SECTION ( 1 ) WFS NOZZLE

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.920

X/LNP	PHI	CP
.250	.500	.750
270.000	-.1800	-.1770
270.000	-.1770	-.1750

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.960

X/LNP	PHI	CP
.250	.500	.750
270.000	-.1760	-.1800
270.000	-.1810	-.1790
270.000	-.1980	-.1930
270.000	-.1970	-.1960
270.000	-.1890	-.1980
270.000	-.1830	-.1740

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.000

X/LNP	PHI	CP
.250	.500	.750
270.000	-.1680	-.1740
270.000	-.1770	-.1770
270.000	-.2110	-.1840
270.000	-.1620	-.1950
270.000	-.1870	-.1970
270.000	-.1820	-.1680

(RBOC19) ( 24 MAY 73 )

DATE 21 SEP 73  
TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0333 SCALE

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.160

DEPENDENT VARIABLE CP

X/LNF	.250	.500	.750
PHI			
.000	-.2200	-.2198	
90.000	-.2190	-.2160	-.2170
135.000	-.2730	-.2230	-.2340
180.000	-.1230	-.0040	-.2330
225.000	-.2580	-.2420	-.2210
270.000	-.2280	-.2240	-.2190

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.170

X/LNF	.250	.500	.750
PHI			
.000	-.2170	-.2160	
90.000	-.2180	-.2160	-.2190
135.000	-.2750	-.2300	-.2370
180.000	-.0530	-.0730	-.2370
225.000	-.2480	-.2440	-.2220
270.000	-.2240	-.2220	-.2190

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.180

X/LNF	.250	.500	.750
PHI			
.000	-.2210	-.2210	
90.000	-.2200	-.2220	-.2230
135.000	-.2730	-.2290	-.2340
180.000	-.1410	-.1470	-.2340
225.000	-.2450	-.2460	-.2280
270.000	-.2290	-.2250	-.2240

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 3.640

X/LNF	.250	.500	.750
PHI			
.000	-.2210	-.2200	
90.000	-.2300	-.2270	-.2270
135.000	-.2430	-.2490	-.2270
180.000	-.0680	-.0130	-.2370
225.000	-.2680	-.2330	-.2330
270.000	-.2200	-.2200	-.2210

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 5.690

X/LNF	.250	.500	.750
PHI			
.000	-.2160	-.2140	
90.000	-.2240	-.2220	-.2210
135.000	-.2490	-.2510	-.2210
180.000	-.0670	-.0110	-.2340
225.000	-.2820	-.2380	-.2410

PARAMETRIC DATA

ALPHAT = -6.000 ORBINC = .500  
RUDDER = .000 ELEVON = .000  
RUOFLR = .000



(RBOU9)

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1498  
 AMES 97-707 1A9 OSA + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZ		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 5.690	X/LNF	.250	.900 .750
	PHI		
	270.000	-.2190	-.2160
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 7.740	X/LNF	.250	.900 .750
	PHI		
	.000	-.2180	-.2160
	90.000	-.2290	-.2260
	135.000	-.2660	-.2380
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.340	X/LNF	.250	.900 .750
	PHI		
	.000	-.1530	-.1580
	90.000	-.1630	-.1580
	135.000	-.1240	-.1430
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.300	X/LNF	.250	.900 .750
	PHI		
	.000	-.1610	-.1630
	90.000	-.1720	-.1650
	135.000	-.1370	-.1680
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.250	X/LNF	.250	.900 .750
	PHI		
	.000	-.1630	-.1670
	90.000	-.1710	-.1680
	135.000	-.1480	-.1670
MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.930	X/LNF	.250	.900 .750
	PHI		
	.000	-.1670	-.1710
	90.000	-.1810	-.1750
	135.000	-.2210	-.1880

(RBOU/S)

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 OSA + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.930	X/LNP	.250	.500 .750
	PMI	270.000	-.1780 -.1740 -.1650
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 8.020	X/LNP	.250	.500 .750
	PMI	.020	-.1600 -.1650
	90.000	-.1700	-.1670 -.1660
	135.000	-.2120	-.1910 -.1760
	180.000	.0760	.0690 -.1880
	225.000	-.1390	-.1780 -.1920
	270.000	-.1780	-.1670 -.1600

DATE 21 SEP 77  
 (RBT010) 24 MAY 73

ADJUSTED PRESSURE DATA - 1A98

AMES 97-707 1A9 C2A + S3 + T9 UPPER MPS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = 0.0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = 0.0000 INCHES  
 SCALE = 0.0000 SCALE

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -0.200

DEPENDENT VARIABLE CP

X/LNP	.250	.500	.750
PHI			
.000	-.2100	-.2120	
90.000	-.2130	-.2140	-.2190
135.000	-.2700	-.2150	-.2300
180.000	-.0880	-.0400	-.2290
225.000	-.2450	-.2370	-.2110
270.000	-.2180	-.2140	-.2100

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.210

X/LNP	.250	.500	.750
PHI			
.000	-.2110	-.2070	
90.000	-.2120	-.2160	-.2090
135.000	-.2690	-.2240	-.2300
180.000	-.0300	-.0560	-.2300
225.000	-.2400	-.2390	-.2110
270.000	-.2140	-.2120	-.2190

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220

X/LNP	.250	.500	.750
PHI			
.000	-.2140	-.2160	
90.000	-.2150	-.2150	-.2170
135.000	-.2720	-.2260	-.2320
180.000	-.0480	-.0760	-.2320
225.000	-.2400	-.2430	-.2200
270.000	-.2180	-.2190	-.2180

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 3.650

X/LNP	.250	.500	.750
PHI			
.000	-.2130	-.2110	
90.000	-.2190	-.2180	-.2170
135.000	-.2350	-.2420	-.2170
180.000	-.0510	-.0250	-.2300
225.000	-.2670	-.2320	-.2320
270.000	-.2100	-.2140	-.2140

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 9.710

X/LNP	.250	.500	.750
PHI			
.000	-.2100	-.2190	
90.000	-.2180	-.2150	-.2130
135.000	-.2410	-.2460	-.2120
180.000	-.0410	-.0500	-.2320
225.000	-.2840	-.2340	-.2360

PARAMETRIC DATA

ALPHAT = -0.000 ORBINC = 0.000  
 RUDDER = 0.000 ELEWIN = 0.000  
 RUDDLE = 0.000

DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A98

PAGE 412

AMES 97-707 1A9 O2A + S3 + T9 UPPER MPS NOZZLE

## SECTION ( 1 ) MPS NOZZLE

(R50010)

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 5.710

X/LNP	PHI	CP
270.000	-.2140	-.2140
270.000	-.2140	-.2110

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 7.770

X/LNP	PHI	CP
270.000	-.2140	-.2140
270.000	-.2140	-.2110

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.390

X/LNP	PHI	CP
270.000	-.2140	-.2140
270.000	-.2140	-.2110

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330

X/LNP	PHI	CP
270.000	-.2140	-.2140
270.000	-.2140	-.2110

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280

X/LNP	PHI	CP
270.000	-.2140	-.2140
270.000	-.2140	-.2110

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -2.170

X/LNP	PHI	CP
270.000	-.2140	-.2140
270.000	-.2140	-.2110

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-717 1A9 ORA + S3 + T9 UPPER MFS NOZZLE

(RB0010)

## SECTION ( 1 ) MFS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170

X/LNP	.250	.500	.750
PHI			
270.000	-.1590	-.1630	-.1540

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.940

X/LNP	.250	.500	.750
PHI			
.000	-.1630	-.1660	
90.000	-.1780	-.1720	-.1670
135.000	-.2190	-.1870	-.1870
180.000	.1220	.0390	-.1750
225.000	-.1780	.1990	-.1870
270.000	-.1770	.1740	-.1630

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.990

X/LNP	.250	.500	.750
PHI			
.000	-.1630	-.1690	
90.000	-.1780	-.1710	-.1690
135.000	-.2210	-.1980	-.1800
180.000	.0980	-.0210	-.1770
225.000	-.1320	-.2050	-.1960
270.000	-.1870	-.1750	-.1680

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.050

X/LNP	.250	.500	.750
PHI			
.000	-.1540	-.1580	
90.000	-.1640	-.1610	-.1580
135.000	-.2120	-.1850	-.1710
180.000	.1070	.0420	-.1790
225.000	-.1200	-.1790	-.1870
270.000	-.1760	-.1640	-.1550

DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 C2A + S3 + T9 UPPER MPS NOZZLE

## REFERENCE DATA

SREF = 2.4210 90.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.42°

X/LNP	.250	.500	.750
PHI			
.000	-.2190	-.2180	-.2150
.90.000	-.2230	-.2180	-.2150
135.000	-.2740	-.2270	-.2430
180.000	-.0790	-.0290	-.2400
225.000	-.2590	-.2520	-.2210
270.000	-.2270	-.2240	-.2200

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.360

X/LNP	.250	.500	.750
PHI			
.000	-.2170	-.2140	-.2160
90.000	-.2190	-.2170	-.2160
135.000	-.2760	-.2280	-.2410
180.000	-.0270	-.0770	-.2370
225.000	-.2490	-.2500	-.2150
270.000	-.2220	-.2170	-.2150

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.310

X/LNP	.250	.500	.750
PHI			
.000	-.2230	-.2210	-.2250
90.000	-.2220	-.2240	-.2250
135.000	-.2850	-.2340	-.2410
180.000	-.1420	-.0710	-.2400
225.000	-.2490	-.2500	-.2270
270.000	-.2250	-.2270	-.2230

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -3.180

X/LNP	.250	.500	.750
PHI			
.000	-.2430	-.2440	-.2460
90.000	-.2490	-.2500	-.2460
135.000	-.2770	-.2600	-.2620
180.000	-.0890	-.0370	-.2600
225.000	-.2710	-.2560	-.2560
270.000	-.2460	-.2470	-.2430

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

X/LNP	.250	.500	.750
PHI			
.000	-.2190	-.2160	-.2230
90.000	-.2260	-.2260	-.2260
135.000	-.2450	-.2500	-.2260
180.000	-.0360	-.0300	-.2370
225.000	-.2750	-.2360	-.2360

## PARAMETRIC DATA

ALPHAT = -8.0000 ORBINC = .500  
 RUDDER = -15.0000 ELEVON = .0000  
 RUDEFL = .0000

AMES 97-7J7 1A9 ORA + S3 + T9 UPPER MPS NOZZLE

(RB0011)

## SECTION : 3) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

X/LNP	.250	.500	.750
PHI			
270.000	-.2170	-.2180	-.2180

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000

X/LNP	.250	.500	.750
PHI			
.000	-.2190	-.2180	
90.000	-.2270	-.2260	-.2220
135.000	-.2580	-.2600	-.2250
180.000	-.0060	-.0050	-.2430
225.000	-.2900	-.2450	-.2490
270.000	-.2260	-.2230	-.2170

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.060

X/LNP	.250	.500	.750
PHI			
.000	-.2190	-.2170	
90.000	-.2320	-.2280	-.2230
135.000	-.2760	-.2490	-.2240
180.000	.0020	-.0060	-.2410
225.000	-.2820	-.2320	-.2410
270.000	-.2210	-.2210	-.2120

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.390

X/LNP	.250	.500	.750
PHI			
.000	-.1530	-.1570	
90.000	-.1750	-.1580	-.1500
135.000	-.1880	-.1580	-.1710
180.000	.0060	-.1480	-.1720
225.000	-.2100	-.1780	-.1740
270.000	-.1650	-.1590	-.1540

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.340

X/LNP	.250	.500	.750
PHI			
.000	-.1610	-.1640	
90.000	-.1740	-.1680	-.1600
135.000	-.1100	-.1800	-.1820
180.000	.0060	-.1490	-.1760
225.000	-.2180	-.1810	-.1860
270.000	-.1720	-.1690	-.1620

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.290

X/LNP	.250	.500	.750
PHI			
.000	-.1630	-.1650	
90.000	-.1720	-.1690	-.1610
135.000	-.1510	-.1840	-.1780
180.000	.0090	-.0320	-.1740
225.000	-.2120	-.1710	-.1850

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBC011)

AKES 97-797 1A9 02A + S3 + T9 UPPER MPS NOZZLE

SECTION : 1) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.290		X/LNP	.250	.500	.750
		PHI			
		270.000	-.1710	-.1690	-.1630
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.180		X/LNP	.250	.500	.750
		PHI			
		.000	-.1570	-.1590	
		90.000	-.1580	-.1570	-.1590
		135.000	-.2280	-.1650	-.1760
		180.000	.1580	.0500	-.1650
		225.000	-.2010	-.1700	-.1710
		270.000	-.1600	-.1590	-.1590
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990		X/LNP	.250	.500	.750
		PHI			
		.000	-.1640	-.1670	
		90.000	-.1750	-.1750	-.1670
		135.000	-.2200	-.1860	-.1860
		180.000	.1370	.0190	-.1740
		225.000	-.1670	-.1970	-.1910
		270.000	-.1770	-.1710	-.1650
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980		X/LNP	.250	.500	.750
		PHI			
		.000	-.1660	-.1700	
		90.000	-.1790	-.1740	-.1700
		135.000	-.2240	-.2040	-.1830
		180.000	.1100	-.1450	-.1740
		225.000	-.1220	-.2070	-.1990
		270.000	-.1910	-.1800	-.1710
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040		X/LNP	.250	.500	.750
		PHI			
		.000	-.1590	-.1610	
		90.000	-.1660	-.1630	-.1620
		135.000	-.2180	-.1880	-.1720
		180.000	.1350	.0110	-.1780
		225.000	-.1150	-.1830	-.1910
		270.000	-.1830	-.1690	-.1640



AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RBO012) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ. FT.    VMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES    VMRP = .0000 INCHES  
 BREF = 39.8490 INCHES    VMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555    BETAT ( 1 ) = -6.350

X/LNP    .250    .500    .750

PHI

.000    -.2310    -.2300

90.000    -.2330    -.2270    -.2310

135.000    -.2770    -.2420    -.2450

180.000    -.1160    .0030    -.2510

225.000    -.2740    -.2590    -.2360

270.000    -.2430    -.2360    -.2350

MACH ( 1 ) = 1.555    BETAT ( 2 ) = -6.310

X/LNP    .250    .500    .750

PHI

.000    -.2260    -.2250

90.000    -.2290    -.2250    -.2280

135.000    -.2790    -.2390    -.2480

180.000    -.1670    -.0510    -.2480

225.000    -.2610    -.2520    -.2310

270.000    -.2350    -.2320    -.2300

MACH ( 1 ) = 1.555    BETAT ( 3 ) = -4.260

X/LNP    .250    .500    .750

PHI

.000    -.2330    -.2310

90.000    -.2330    -.2330    -.2340

135.000    -.2780    -.2420    -.2470

180.000    -.1650    -.1840    -.2480

225.000    -.2550    -.2540    -.2360

270.000    -.2390    -.2350    -.2350

MACH ( 1 ) = 1.555    BETAT ( 4 ) = -3.170

X/LNP    .250    .500    .750

PHI

.000    -.2430    -.2430

90.000    -.2470    -.2470    -.2430

135.000    -.2630    -.2560    -.2550

180.000    .0220    -.1800    -.2560

225.000    -.2630    -.2530    -.2520

270.000    -.2450    -.2440    -.2410

MACH ( 1 ) = 1.555    BETAT ( 5 ) = 3.930

X/LNP    .250    .500    .750

PHI

.000    -.2270    -.2260

90.000    -.2370    -.2330    -.2340

135.000    -.2530    -.2510    -.2360

180.000    -.1840    -.1530    -.2430

225.000    -.2690    -.2410    -.2380

## PARAMETRIC DATA

ALPHAT = -4.000    ORBINC = .500  
 RUDDER = -15.000    ELEVON = .000  
 RUFLR = .000

AMES 97-707 1A9 ORA + S3 + T9 UPPER MPS NOZZLE

(R9C012)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.930 X/LNP .250 .500 .750  
PHI 270.000 -.2270 -.2270 -.2270 -.2270

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.980 X/LNP .250 .500 .750  
PHI .000 -.2280 -.2290  
90.000 -.2390 -.2390 -.2390  
135.000 -.2670 -.2650 -.2390  
180.000 -.0450 -.0430 -.2530  
225.000 -.2380 -.2300 -.2520  
270.000 -.2330 -.2290 -.2280

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.020 X/LNP .250 .500 .750  
PHI .000 -.2300 -.2290  
90.000 -.2400 -.2370 -.2390  
135.000 -.2810 -.2590 -.2380  
180.000 -.0330 .0480 -.2520  
225.000 -.2880 -.2460 -.2480  
270.000 -.2310 -.2280 -.2240

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.320 X/LNP .250 .500 .750  
PHI .000 -.1650 -.1680  
90.000 -.1720 -.1640 -.1620  
135.000 -.1400 -.1540 -.1710  
180.000 .0120 .0480 -.1840  
225.000 -.2030 -.1940 -.1750  
270.000 -.1720 -.1690 -.1670

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -0.280 X/LNP .250 .500 .750  
PHI .000 -.1750 -.1770  
90.000 -.1830 -.1770 -.1710  
135.000 -.1570 -.1750 -.1850  
180.000 .0270 .0570 -.1870  
225.000 -.2150 -.1890 -.1930  
270.000 -.1810 -.1790 -.1750

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -0.240 X/LNP .250 .500 .750  
PHI .000 -.1790 -.1760  
90.000 -.1800 -.1750 -.1710  
135.000 -.1860 -.1830 -.1820  
180.000 .0480 .0300 -.1840  
225.000 -.2070 -.1830 -.1940

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 CEA + S3 + T9 UPPER MPS NOZZLE

(RBO012)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.240		X/LNP	.250 .500 .750
		PHI	
		270.000	-.1780 -.1780 -.1720
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -3.170		X/LNP	.250 .500 .750
		PHI	
		.000	-.1730 -.1740
		90.000	-.1760 -.1740 -.1740
		135.000	-.2370 -.1820 -.1910
		180.000	.0890 .0120 -.1810
		225.000	-.2110 -.1880 -.1840
		270.000	-.1760 -.1760 -.1720
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.920		X/LNP	.250 .500 .750
		PHI	
		.000	-.1760 -.1840
		90.000	-.1850 -.1820 -.1790
		135.000	-.2260 -.1940 -.1950
		180.000	.0510 .0420 -.1880
		225.000	-.2010 -.1970 -.1940
		270.000	-.1860 -.1820 -.1740
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.960		X/LNP	.250 .500 .750
		PHI	
		.000	-.1740 -.1780
		90.000	-.1840 -.1840 -.1780
		135.000	-.2250 -.1950 -.1910
		180.000	.0470 -.0190 -.1940
		225.000	-.1820 -.2120 -.2140
		270.000	-.1880 -.1820 -.1730
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.010		X/LNP	.250 .500 .750
		PHI	
		.000	-.1680 -.1710
		90.000	-.1760 -.1750 -.1730
		135.000	-.2100 -.2120 -.1790
		180.000	.0440 .1150 -.1890
		225.000	-.1490 -.1830 -.1930
		270.000	-.1790 -.1740 -.1630

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(R80013) ( 24 MAY 73 )

ANES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0316 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUDFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.310	X/LNF	PHI	.250	.500	.750
		.000		-.2460	-.2450	
		90.000		-.2490	-.2450	-.2470
		135.000		-.2940	-.2650	-.2530
		180.000		-.1230	-.0550	-.2630
		225.000		-.2790	-.2680	-.2520
		270.000		-.2570	-.2520	-.2500

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.280

X/LNF	PHI	.250	.500	.750
.000		-.2430	-.2450	
90.000		-.2460	-.2430	-.2450
135.000		-.2780	-.2670	-.2580
180.000		-.0370	-.0640	-.2640
225.000		-.2710	-.2740	-.2490
270.000		-.2510	-.2480	-.2480

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

X/LNF	PHI	.250	.500	.750
.000		-.2380	-.2380	
90.000		-.2390	-.2410	-.2410
135.000		-.2670	-.2480	-.2470
180.000		-.1110	-.1280	-.2510
225.000		-.2640	-.2510	-.2440
270.000		-.2470	-.2430	-.2430

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -2.140

X/LNF	PHI	.250	.500	.750
.000		-.2420	-.2430	
90.000		-.2470	-.2460	-.2440
135.000		-.2540	-.2590	-.2510
180.000		-.1410	-.1340	-.2550
225.000		-.2610	-.2530	-.2470
270.000		-.2460	-.2430	-.2410

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

X/LNF	PHI	.250	.500	.750
.000		-.2350	-.2330	
90.000		-.2440	-.2410	-.2410
135.000		-.2590	-.2520	-.2440
180.000		-.1070	-.1040	-.2490
225.000		-.2710	-.2510	-.2410

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AVES 97-75.7 1A9 OCA + S3 + T9 UPPER MPS NOZZLE

(RBC013)

SECTION : 1 MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940  
X/LNP .250 .500 .750  
PHI 270.000 -.2340 -.2330 -.2340

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990  
X/LNP .250 .500 .750  
PHI .000 -.2370 -.2380  
90.000 -.2470 -.2440 -.2460  
135.000 -.2700 -.2740 -.2500  
180.000 -.0270 -.0270 -.0240  
225.000 -.2840 -.2590 -.2490  
270.000 -.2400 -.2370 -.2360

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.030  
X/LNP .250 .500 .750  
PHI .000 -.2460 -.2450  
90.000 -.2560 -.2540 -.2530  
135.000 -.2860 -.2720 -.2550  
180.000 -.0380 .0150 -.2670  
225.000 -.2950 -.2670 -.2570  
270.000 -.2490 -.2430 -.2420

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.300  
X/LNP .250 .500 .750  
PHI .000 -.1700 -.1720  
90.000 -.1750 -.1710 -.1740  
135.000 -.1840 -.1840 -.1840  
180.000 -.1690 .0710 -.1910  
225.000 -.1920 -.1890 -.1750  
270.000 -.1780 -.1750 -.1710

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260  
X/LNP .250 .500 .750  
PHI .000 -.1800 -.1840  
90.000 -.1860 -.1820 -.1810  
135.000 -.1960 -.1880 -.1880  
180.000 -.0300 -.0260 -.1960  
225.000 -.2130 -.2050 -.1880  
270.000 -.1880 -.1860 -.1830

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220  
X/LNP .250 .500 .750  
PHI .000 -.1830 -.1850  
90.000 -.1890 -.1850 -.1850  
135.000 -.2060 -.1980 -.1910  
180.000 .0360 -.0520 -.2020  
225.000 -.2140 -.1940 -.2040

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
ANES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RBO013)

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220  
X/LNP .250 .500 .750  
PHI 270.000 -.1900 -.1890 -.1840

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.140  
X/LNP .250 .500 .750  
PHI .000 -.1780 -.1790  
90.000 -.1810 -.1790 -.1790  
135.000 -.2230 -.1880 -.1940  
180.000 .0360 -.0030 -.1860  
225.000 -.2080 -.1930 -.1860  
270.000 -.1810 -.1840 -.1750

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930  
X/LNP .250 .500 .750  
PHI .000 -.1790 -.1810  
90.000 -.1870 -.1830 -.1810  
135.000 -.2200 -.1940 -.1920  
180.000 -.0290 .0390 -.1950  
225.000 -.2180 -.1960 -.1910  
270.000 -.1850 -.1840 -.1760

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980  
X/LNP .250 .500 .750  
PHI .000 -.1750 -.1780  
90.000 -.1810 -.1790 -.1790  
135.000 -.2090 -.1980 -.1810  
180.000 -.0310 .0730 -.1940  
225.000 -.2110 -.1850 -.1930  
270.000 -.1820 -.1760 -.1720

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.020  
X/LNP .250 .500 .750  
PHI .000 -.1770 -.1790  
90.000 -.1860 -.1830 -.1830  
135.000 -.2020 -.1950 -.1830  
180.000 .0160 .0130 -.1980  
225.000 -.2010 -.1910 -.2040  
270.000 -.1920 -.1830 -.1750

DATE 21 SEP 73  
 ABULATED PRESSURE DATA - 1A98  
 AMES 97-737 1A9 OBA + S3 + T9 UPPER MPS NOZZLE

(RBO014) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = 4.1000 ORBINC = .5000  
 RUDDER = -15.0000 ELEVON = .0000  
 RUDFLR = .0000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 26.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .1000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP			
MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.300	X/LNP	.250	.500	.750
		PHI			
		.1000	-.2600	-.2610	
		90.1000	-.2640	-.2630	-.2630
		135.1000	-.2660	-.2710	
		180.1000	-.2680	-.2710	-.2710
		225.1000	-.2690	-.2740	-.2640
		270.1000	-.2680	-.2630	-.2630
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.260	X/LNP	.250	.500	.750
		PHI			
		.1000	-.2570	-.2580	
		90.1000	-.2590	-.2580	-.2610
		135.1000	-.2670	-.2610	-.2650
		180.1000	-.2620	-.2610	-.2750
		225.1000	-.2630	-.2610	-.2650
		270.1000	-.2660	-.2620	-.2610
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.220	X/LNP	.250	.500	.750
		PHI			
		.1000	-.2510	-.2510	
		90.1000	-.2520	-.2510	-.2520
		135.1000	-.2730	-.2640	-.2550
		180.1000	-.2690	-.2620	-.2630
		225.1000	-.2710	-.2690	-.2570
		270.1000	-.2560	-.2540	-.2530
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.120	X/LNP	.250	.500	.750
		PHI			
		.1000	-.2360	-.2350	
		90.1000	-.2410	-.2390	-.2390
		135.1000	-.2380	-.2330	-.2410
		180.1000	-.2420	-.2350	-.2410
		225.1000	-.2470	-.2480	-.2410
		270.1000	-.2410	-.2380	-.2360
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.950	X/LNP	.250	.500	.750
		PHI			
		.1000	-.2440	-.2430	
		90.1000	-.2510	-.2490	-.2510
		135.1000	-.2750	-.2650	-.2510
		180.1000	-.2570	-.2620	-.2570
		225.1000	-.2810	-.2610	-.2490

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A - S3 + T9 UPPER MPS NOZZLE

(RBC014)

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SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.950

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.040

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.290

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.290

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.290

X/LNF .250 .500 .750  
PHI  
270.000 -.2480 -.2450 -.2450

X/LNF .250 .500 .750  
PHI  
.000 -.2480 -.2510

90.000 -.2570 -.2540 -.2550  
135.000 -.2680 -.2770 -.2650  
180.000 -.0950 -.0770 -.2630  
225.000 -.2890 -.2720 -.2540  
270.000 -.2520 -.2460 -.2460

X/LNF .250 .500 .750  
PHI  
.000 -.2570 -.2580

90.000 -.2680 -.2640 -.2640  
135.000 -.2680 -.2770 -.2650  
180.000 -.0660 -.0750 -.2730  
225.000 -.3050 -.2820 -.2630  
270.000 -.2590 -.2550 -.2540

X/LNF .250 .500 .750  
PHI  
.000 -.1840 -.1810

90.000 -.1940 -.1870 -.1860  
135.000 -.1920 -.1830 -.1920  
180.000 -.1240 -.1110 -.2170  
225.000 -.2130 -.1930 -.1860  
270.000 -.1890 -.1860 -.1810

X/LNF .250 .500 .750  
PHI  
.000 -.1860 -.1860

90.000 -.1940 -.1880 -.1870  
135.000 -.2120 -.1910 -.1950  
180.000 -.1060 -.1280 -.2110  
225.000 -.2110 -.2140 -.1890  
270.000 -.1910 -.1940 -.1860

X/LNF .250 .500 .750  
PHI  
.000 -.1880 -.1940

90.000 -.1920 -.1910 -.1890  
135.000 -.2300 -.2120 -.1970  
180.000 -.1420 -.1460 -.2140  
225.000 -.2140 -.2140 -.2140



DATE 21 SEP 71

CALCULATED PRESSURE DATA - 1A98

AMES 97-757 1A9 ORA + S3 + T9 UPPER MPS NOZZLE

(RB0014)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200  
 X/LNF .250 .500 .750  
 PHI  
 270.000 -.1950 -.1930 -.1880

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -1.150  
 X/LNF .250 .500 .750  
 PHI  
 .000 -.1820 -.1840  
 90.000 -.1850 -.1830 -.1840  
 135.000 -.2050 -.1910 -.1970  
 180.000 .0080 -.1420 -.1920  
 225.000 -.2080 -.1980 -.1940  
 270.000 -.1870 -.1850 -.1810

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.500  
 X/LNF .250 .500 .750  
 PHI  
 .000 -.1880 -.1940  
 90.000 -.1980 -.1930 -.1930  
 135.000 -.2240 -.2140 -.1970  
 180.000 -.0290 -.1450 -.2030  
 225.000 -.2350 -.2130 -.2020  
 270.000 -.1940 -.1910 -.1870

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.990  
 X/LNF .250 .500 .750  
 PHI  
 .000 -.1870 -.1810  
 90.000 -.1880 -.1870 -.1860  
 135.000 -.2120 -.1980 -.1870  
 180.000 -.0790 -.1260 -.1980  
 225.000 -.2240 -.1850 -.1950  
 270.000 -.1890 -.1860 -.1790

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.000  
 X/LNF .250 .500 .750  
 PHI  
 .000 -.1910 -.1930  
 90.000 -.2120 -.1990 -.1970  
 135.000 -.2150 -.2070 -.1980  
 180.000 -.0180 -.1050 -.2140  
 225.000 -.2140 -.2040 -.2090  
 270.000 -.2060 -.1970 -.1890

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + 53 + 79 UPPER MPS NOZZLE

(RUC015) ( 24 MAY '73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XGRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YGRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZGRP = .0000 INCHES  
 SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 6.1440 ORBINC = .500  
 RUDDER = -15.1440 ELEVON = .1440  
 RUOFLR = .0000

SECTION ( 1 ) MPS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.320  
 X/LNP .000 .250 .500 .750  
 PHI  
 .000 -2600 -2610 -2660  
 90.000 -2630 -2690 -2710  
 135.000 -2930 -2780 -2710  
 180.000 -1920 -2180 -2740  
 225.000 -2870 -2720 -2650  
 270.000 -2690 -2630 -2630

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.280  
 X/LNP .000 .250 .500 .750  
 PHI  
 .000 -2580 -2600 -2620  
 90.000 -2620 -2610 -2620  
 135.000 -2910 -2780 -2670  
 180.000 -1080 410 -2760  
 225.000 -2840 -2810 -2660  
 270.000 -2660 -2630 -2620

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230  
 X/LNP .000 .250 .500 .750  
 PHI  
 .000 -2490 -2520 -2510  
 90.000 -2530 -2520 -2510  
 135.000 -2720 -2710 -2570  
 180.000 -1790 -1370 -2660  
 225.000 -2740 -2680 -2590  
 270.000 -2580 -2560 -2540

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120  
 X/LNP .000 .250 .500 .750  
 PHI  
 .000 -2390 -2390 -2410  
 90.000 -2440 -2420 -2410  
 135.000 -2420 -2550 -2440  
 180.000 -1890 -1980 -2430  
 225.000 -2480 -2340 -2420  
 270.000 -2430 -2420 -2410

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.970  
 X/LNP .000 .250 .500 .750  
 PHI  
 .000 -2440 -2430 -2490  
 90.000 -2540 -2480 -2490  
 135.000 -2630 -2650 -2540  
 180.000 -1680 -1450 -2540  
 225.000 -2710 -2590 -2460

AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RB0015)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.970

X/LNP	.250	.500	.750
PHI			
270.000	-.2450	-.2420	-.2420

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.030

X/LNP	.250	.500	.750
PHI			
.000	-.2520	-.2540	
90.000	-.2600	-.2580	-.2580
135.000	-.2810	-.2730	-.2600
180.000	-.1030	-.1090	-.2670
225.000	-.2910	-.2700	-.2580
270.000	-.2540	-.2520	-.2550

MACH ( 1 ) = 3.555 BETAT ( 7 ) = 8.080

X/LNP	.250	.500	.750
PHI			
.000	-.2620	-.2630	
90.000	-.2740	-.2710	-.2690
135.000	-.2880	-.2770	-.2710
180.000	-.1130	-.1030	-.2780
225.000	-.3000	-.2770	-.2720
270.000	-.2640	-.2620	-.2610

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.260

X/LNP	.250	.500	.750
PHI			
.000	-.1870	-.1880	
90.000	-.1940	-.1910	-.1910
135.000	-.2050	-.1910	-.1930
180.000	-.1040	-.0310	-.2010
225.000	-.2060	-.2030	-.1910
270.000	-.1910	-.1940	-.1870

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -4.210

X/LNP	.250	.500	.750
PHI			
.000	-.1880	-.2050	
90.000	-.1930	-.2060	-.2070
135.000	-.2220	-.2200	-.2110
180.000	-.0400	-.0810	-.2200
225.000	-.2120	-.2170	-.2140
270.000	-.2100	-.2080	-.2030

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -.130

X/LNP	.250	.500	.750
PHI			
.000	-.1840	-.1850	
90.000	-.1870	-.1860	-.1870
135.000	-.2010	-.1890	-.1960
180.000	-.0450	-.0690	-.1950
225.000	-.2100	-.2030	-.1890

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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ANES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RB0015)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -.130  
 X/LNF .250 .500 .750  
 PHI  
 270.000 -.1680 -.1670 -.1630

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.970  
 X/LNF .250 .500 .750  
 PHI  
 .000 -.1670 -.1690  
 90.000 -.1926 -.1920 -.1940  
 135.000 -.2140 -.2050 -.1940  
 180.000 -.1040 -.1040 -.2030  
 225.000 -.2280 -.2120 -.2100  
 270.000 -.1950 -.1920 -.1670

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 6.020  
 X/LNF .250 .500 .750  
 PHI  
 .000 -.1620 -.1680  
 90.000 -.1900 -.1730 -.1730  
 135.000 -.2030 -.1850 -.1750  
 180.000 -.1190 -.1060 -.1680  
 225.000 -.2110 -.1670 -.1620  
 270.000 -.1770 -.1730 -.1670

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.070  
 X/LNF .250 .500 .750  
 PHI  
 .000 -.1680 -.1680  
 90.000 -.1970 -.1940 -.1930  
 135.000 -.2170 -.2010 -.1940  
 180.000 -.1030 -.1040 -.2140  
 225.000 -.2170 -.1920 -.2140  
 270.000 -.2040 -.1930 -.1630

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBC016) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 S3.77. YMRP = 28.5344 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

PARAMETRIC DATA

ALPHAT = 0.000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUZFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE	X/LNP	PHI	.250	.300	.750
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -0.350					
	.000		-.2630	-.2640	-.2690
	90.000		-.2740	-.2680	-.2710
	135.000		-.2890	-.2700	-.2710
	180.000		-.2160	-.2410	-.2740
	225.000		-.2880	-.2680	-.2670
	270.000		-.2720	-.2670	-.2660
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -0.290					
	X/LNP	PHI	.250	.300	.750
	.000		-.2560	-.2590	-.2590
	90.000		-.2630	-.2630	-.2630
	135.000		-.2760	-.2660	-.2720
	180.000		-.1330	-.1630	-.2720
	225.000		-.2760	-.2710	-.2630
	270.000		-.2640	-.2610	-.2610
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -0.240					
	X/LNP	PHI	.250	.300	.750
	.000		-.2480	-.2520	-.2520
	90.000		-.2540	-.2540	-.2540
	135.000		-.2640	-.2680	-.2560
	180.000		-.1170	-.1470	-.2640
	225.000		-.2690	-.2660	-.2580
	270.000		-.2560	-.2540	-.2530
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110					
	X/LNP	PHI	.250	.300	.750
	.000		-.2360	-.2370	-.2390
	90.000		-.2440	-.2410	-.2390
	135.000		-.2420	-.2320	-.2420
	180.000		-.1120	-.2190	-.2420
	225.000		-.2460	-.2440	-.2410
	270.000		-.2480	-.2410	-.2360
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 0.000					
	X/LNP	PHI	.250	.300	.750
	.000		-.2430	-.2490	-.2510
	90.000		-.2530	-.2540	-.2510
	135.000		-.2610	-.2670	-.2520
	180.000		-.1490	-.1690	-.2560
	225.000		-.2720	-.2620	-.2490

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(R8C016)

AWES 97-707 1A9 ORA + S3 + 19 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 4.000		X/LNP	.250 .500 .750
		PHI	
		270.000	-.2900 -.2450 -.2440
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.060		X/LNP	.250 .500 .750
		PHI	
		.000	-.2540 -.2570
		90.000	-.2640 -.2610 -.2610
		135.000	-.2800 -.2710 -.2620
		180.000	-.1590 -.1710 -.2690
		225.000	-.2920 -.2630 -.2610
		270.000	-.2590 -.2570 -.2560
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.120		X/LNP	.250 .500 .750
		PHI	
		.000	-.2670 -.2680
		90.000	-.2770 -.2720 -.2710
		135.000	-.2910 -.2760 -.2720
		180.000	-.1950 -.1460 -.2790
		225.000	-.3070 -.2690 -.2720
		270.000	-.2690 -.2690 -.2670
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.340		X/LNP	.250 .500 .750
		PHI	
		.000	-.2170 -.2220
		90.000	-.2320 .0000 .0000
		135.000	-.2330 .0000 .0000
		180.000	-.1950 .0000 .0000
		225.000	-.2400 .0000 .0000
		270.000	-.2240 .0000 .0000
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -0.270		X/LNP	.250 .500 .750
		PHI	
		.000	-.1870 -.1870
		90.000	-.1980 -.1910 -.1900
		135.000	-.2050 -.1830 -.1940
		180.000	-.1630 -.1630 -.2120
		225.000	-.2050 -.2130 -.1920
		270.000	-.1920 -.1940 -.1880
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -0.220		X/LNP	.250 .500 .750
		PHI	
		.000	-.1890 -.1910
		90.000	-.1970 -.1920 -.1920
		135.000	-.2040 -.2010 -.1970
		180.000	-.1610 -.1670 -.2130
		225.000	-.2080 -.2160 -.1970

DATE 21 SEP 73

TAULATED PRESSURE DATA - 1A98

(RBC016)

SECTION ( 1 ) MPS NOZZLE

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220

DEPENDENT VARIABLE CP  
X/LNP .250 .500 .750  
PHI  
270.000 -.1950 -.1930 -.1900

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.120

X/LNP .250 .500 .750  
PHI  
.000 -.1880 -.1890  
90.000 -.1900 -.1910  
135.000 -.2140 -.1880  
180.000 -.0300 -.0870  
225.000 -.2160 -.2059  
270.000 -.1910 -.1910

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990

X/LNP .250 .500 .750  
PHI  
.000 -.1930 -.1940  
90.000 -.1990 -.1970  
135.000 -.2179 -.2190  
180.000 -.0890 -.0620  
225.000 -.2190 -.2070  
270.000 -.2000 -.1980

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.050

X/LNP .250 .500 .750  
PHI  
.000 -.1830 -.1840  
90.000 -.1880 -.1870  
135.000 -.2010 -.1970  
180.000 -.1390 -.0180  
225.000 -.2240 -.1830  
270.000 -.1940 -.1860

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.110

X/LNP .250 .500 .750  
PHI  
.000 -.1890 -.1890  
90.000 -.1950 -.1950  
135.000 -.2140 -.2040  
180.000 -.1910 -.1950  
225.000 -.2190 -.1940  
270.000 -.1990 -.1910

DATE 23 SEP 73

TABULATED PRESSURE DATA - 1A98

ANES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RECD17) ( 24 MAY 73 )

REFERENCE DATA

SRCP = 2.4210 90.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.410

DEPENDENT VARIABLE CP

X/LNP	.250	.500	.750
PHI			
.000	-.2050	-.2040	
90.000	-.2070	-.2030	-.2120
135.000	-.2660	-.2150	-.2240
180.000	-.0610	.0160	-.2240
225.000	-.2460	-.2330	-.2180
270.000	-.2150	-.2100	-.2080

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.360

X/LNP	.250	.500	.750
PHI			
.000	-.2050	-.2020	
90.000	-.2060	-.2030	-.2030
135.000	-.2630	-.2160	-.2250
180.000	-.0290	.0320	-.2240
225.000	-.2360	-.2350	-.2160
270.000	-.2100	-.2060	-.2050

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.300

X/LNP	.250	.500	.750
PHI			
.000	-.2150	-.2140	
90.000	-.2140	-.2150	-.2160
135.000	-.2740	-.2250	-.2290
180.000	-.0480	-.0410	-.2320
225.000	-.2430	-.2430	-.2230
270.000	-.2210	-.2180	-.2160

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -3.180

X/LNP	.250	.500	.750
PHI			
.000	-.2240	-.2240	
90.000	-.2280	-.2280	-.2260
135.000	-.2500	-.2370	-.2390
180.000	.0650	.0370	-.2380
225.000	-.2460	-.2340	-.2340
270.000	-.2280	-.2240	-.2240

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990

X/LNP	.250	.500	.750
PHI			
.000	-.2160	-.2160	
90.000	-.2190	-.2170	-.2150
135.000	-.2350	-.2410	-.2190
180.000	-.0390	.0440	-.2270
225.000	-.2590	-.2220	-.2250

PARAMETRIC DATA

ALPHAT = -8.000 ORBITNC = .500  
 RUDDER = -10.000 ELEVON = .000  
 RUFLR = .000



(R80017)

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 OSA + S3 + T9 UPPER MFS NOZZLE

SECTION ( 1 ) MFS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.930	X/LNF	.250 .500 .750
		PHI	
		270.000	-.2080 -.2080 -.2080
		X/LNF	
		PHI	
		.000	-.2080 -.2080 -.2073
		90.000	-.2120 -.2090 -.2080
		135.000	-.2350 -.2430 -.2080
		180.000	-.0210 .0480 -.2250
		225.000	-.2690 -.2250 -.2250
		270.000	-.2040 -.2040 -.2130
		X/LNF	
		PHI	
		.000	-.2080 -.2080 -.2080
		90.000	-.2170 -.2120 -.2090
		135.000	-.2570 -.2330 -.2100
		180.000	-.0140 .0590 -.2250
		225.000	-.2740 -.2190 -.2260
		270.000	-.2030 -.2030 -.1980
		X/LNF	
		PHI	
		.000	-.1460 -.1510 -.1430
		90.000	-.1610 -.1510 -.1430
		135.000	-.0960 -.1610 -.1650
		180.000	.0670 -.0230 -.1640
		225.000	-.2040 -.1780 -.1630
		270.000	-.1580 -.1530 -.1490
		X/LNF	
		PHI	
		.000	-.1560 -.1630 -.1550
		90.000	-.1670 -.1620 -.1550
		135.000	-.1080 -.1780 -.1740
		180.000	.0910 -.0590 -.1730
		225.000	-.2030 -.1780 -.1840
		270.000	-.1680 -.1640 -.1570
		X/LNF	
		PHI	
		.000	-.1550 -.1570 -.1540
		90.000	-.1640 -.1630 -.1620
		135.000	-.1590 -.1720 -.1680
		180.000	.0350 .0350 -.1660
		225.000	-.1960 -.1640 -.1760
		270.000	-.1960 -.1640 -.1760
		X/LNF	
		PHI	
		.000	-.1550 -.1570 -.1540
		90.000	-.1640 -.1630 -.1620
		135.000	-.1590 -.1720 -.1680
		180.000	.0350 .0350 -.1660
		225.000	-.1960 -.1640 -.1760
		270.000	-.1960 -.1640 -.1760

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.090

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.380

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A99

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AMES 97-707 1A9 OSA + S3 + T9 UPPER MP'S NOZZLE

(RBC017)

## SECTION ( 1 ) MP'S NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280

X/LNP PHI	.250	.500	.750
270.000	-.1630	-.1630	-.1550

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -3.170

X/LNP PHI	.250	.500	.750
.000	-.1580	-.1580	
90.000	-.1600	-.1580	-.1580
135.000	-.2240	-.1680	-.1780
180.000	.1620	.0520	-.1640
225.000	-.2020	-.1730	-.1720
270.000	-.1610	-.1590	-.1540

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930

X/LNP PHI	.250	.500	.750
.000	-.1595	-.1620	
90.000	-.1710	-.1690	-.1630
135.000	-.2160	-.1820	-.1810
180.000	.1340	.0500	-.1720
225.000	-.1780	-.1880	-.1840
270.000	-.1725	-.1680	-.1580

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980

X/LNP PHI	.250	.500	.750
.000	-.1610	-.1640	
90.000	-.1740	-.1690	-.1680
135.000	-.2210	-.1910	-.1820
180.000	.1050	-.0150	-.1740
225.000	-.1340	-.2030	-.1920
270.000	-.1800	-.1720	-.1640

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040

X/LNP PHI	.250	.500	.750
.000	-.1530	-.1590	
90.000	-.1640	-.1610	-.1590
135.000	-.2140	-.1840	-.1720
180.000	.1280	.0260	-.1760
225.000	-.1170	-.1820	-.1880
270.000	-.1770	-.1640	-.1560

(R00018) ( 24 MAY 75 )

PARAMETRIC DATA

ALPHAT = -4.0000 ORBINC = .5000  
 RUDDER = -10.0000 ELEVON = .0000  
 RUDDLR = .0000

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

REFERENCE DATA

SREP = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.6490 INCHES YMRP = .0000 INCHES  
 BREF = 39.6490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.340  
 X/LNP .250 .500 .750  
 PHI  
 .0000 -2260 -2260  
 90.0000 -2250 -2240 -2270  
 135.0000 -2740 -2390 -2400  
 180.0000 -1210 -0140 -2470  
 225.0000 -2690 -2520 -2330  
 270.0000 -2350 -2330 -2310

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.300

X/LNP .250 .500 .750  
 PHI  
 .0000 -2240 -2240  
 90.0000 -2250 -2230 -2250  
 135.0000 -2750 -2360 -2420  
 180.0000 -1070 -1570 -2430  
 225.0000 -2570 -2460 -2280  
 270.0000 -2340 -2290 -2280

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.250

X/LNP .250 .500 .750  
 PHI  
 .0000 -2280 -2280  
 90.0000 -2280 -2280 -2290  
 135.0000 -2730 -2370 -2390  
 180.0000 -1670 -1640 -2430  
 225.0000 -2490 -2460 -2330  
 270.0000 -2350 -2320 -2340

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -2.160

X/LNP .250 .500 .750  
 PHI  
 .0000 -2330 -2340  
 90.0000 -2360 -2350 -2330  
 135.0000 -2490 -2450 -2430  
 180.0000 -1690 -1620 -2450  
 225.0000 -2520 -2440 -2380  
 270.0000 -2350 -2340 -2320

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990

X/LNP .250 .500 .750  
 PHI  
 .0000 -2240 -2220  
 90.0000 -2320 -2290 -2310  
 135.0000 -2450 -2450 -2310  
 180.0000 -1640 -1620 -2390  
 225.0000 -2610 -2330 -2310

(R00018)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 AXES 97-707 1A9 02A + 53 + 19 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.930	X/LNP	.250	.900 .750
	PHI		
	270.000	-.2210	-.2200 -.2220
	X/LNP	.250	.900 .750
	PHI		
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.980	.000	-.2240	-.2230
	90.000	-.2340	-.2290 -.2310
	135.000	-.2560	-.2610 -.2310
	180.000	-.0620	.0280 -.2460
	225.000	-.2790	-.2430 -.2430
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.020	270.000	-.2240	-.2220 -.2210
	X/LNP	.250	.900 .750
	PHI		
	.000	-.2210	-.2210
	90.000	-.2300	-.2270 -.2280
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.320	135.000	-.2630	-.2540 -.2290
	180.000	-.1020	.0610 -.2470
	225.000	-.2780	-.2400 -.2340
	270.000	-.2210	-.2180 -.2150
	X/LNP	.250	.900 .750
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -0.320	PHI		
	.000	-.1570	-.1600
	90.000	-.1690	-.1570 -.1590
	135.000	-.1410	-.1340 -.1640
	180.000	.0120	.0840 -.1770
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -0.320	225.000	-.1940	-.1870 -.1640
	270.000	-.1650	-.1620 -.1590
	X/LNP	.250	.900 .750
	PHI		
	.000	-.1670	-.1720
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230	90.000	-.1780	-.1720 -.1660
	135.000	-.1560	-.1730 -.1770
	180.000	.0310	-.0430 -.1840
	225.000	-.2090	-.1820 -.1880
	270.000	-.1770	-.1740 -.1690
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230	X/LNP	.250	.900 .750
	PHI		
	.000	-.1690	-.1720
	90.000	-.1770	-.1730 -.1750
	135.000	-.1860	-.1820 -.1780
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230	180.000	.1110	-.0210 -.1830
	225.000	-.2050	-.1840 -.1870
	X/LNP	.250	.900 .750
	PHI		
	.000	-.1690	-.1720



DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 ANES 97-707 1A9 CEA + 93 + 79 UPPER MPS NOZZLE

REFERENCE DATA  
 SREF = 2.4210 SQ.FT. XMRP = 28.3300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.320

X/LNF	PHI	.250	.500	.750
.000		-.2400	-.2400	
90.000		-.2430	-.2390	-.2420
135.000		-.2690	-.2630	-.2500
180.000		-.1140	-.1120	-.2570
225.000		-.2720	-.2580	-.2450
270.000		-.2510	-.2470	-.2440

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270

X/LNF	PHI	.250	.500	.750
.000		-.2320	-.2330	
90.000		-.2350	-.2320	-.2330
135.000		-.2670	-.2500	-.2430
180.000		-.1430	-.1680	-.2520
225.000		-.2570	-.2560	-.2390
270.000		-.2400	-.2370	-.2370

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

X/LNF	PHI	.250	.500	.750
.000		-.2370	-.2360	
90.000		-.2370	-.2370	-.2390
135.000		-.2640	-.2460	-.2450
180.000		-.1130	-.1390	-.2460
225.000		-.2600	-.2450	-.2410
270.000		-.2430	-.2400	-.2390

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.140

X/LNF	PHI	.250	.500	.750
.000		-.2320	-.2320	
90.000		-.2360	-.2360	-.2350
135.000		-.2400	-.2500	-.2380
180.000		-.1050	-.1300	-.2430
225.000		-.2480	-.2450	-.2360
270.000		-.2360	-.2340	-.2320

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990

X/LNF	PHI	.250	.500	.750
.000		-.2260	-.2280	
90.000		-.2370	-.2330	-.2330
135.000		-.2520	-.2400	-.2340
180.000		-.1490	-.1250	-.2340
225.000		-.2490	-.2400	-.2310

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUFLR = .000

(RBC019)

DATE 21 SEP 73  
 CALCULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 O2A + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.950	X/LNF	.250	.500 .750
	PHI	-2280	-2260 -2250
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990	X/LNF	.250	.500 .750
	PHI	-2280	-2290 -2360
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.040	X/LNF	.250	.500 .750
	PHI	-2370	-2380 -2420
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.300	X/LNF	.250	.500 .750
	PHI	-1690	-1710 -1730
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260	X/LNF	.250	.500 .750
	PHI	-1760	-1790 -1760
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220	X/LNF	.250	.500 .750
	PHI	-1840	-1820 -1810

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A9B  
AMES 97-707 1A9 OSA + S3 + T9 UPPER MPS NOZZLE

(RBCD19)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220	X/LNP	.250	.500 .750
	PHI		
	270.000	-.1840	-.1840 -.1800
	X/LNP	.250	.500 .750
	PHI		
	.000	-.1775	-.1790
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.140	90.000	-.1810	-.1800
	135.000	-.2200	-.1880
	180.000	.0360	-.1440
	225.000	-.2160	-.1930
	270.000	-.1810	-.1790
			-.1760
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930	X/LNP	.250	.500 .750
	PHI		
	.000	-.1780	-.1800
	90.000	-.1840	-.1820
	135.000	-.2180	-.1870
	180.000	-.0320	.0440
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980	225.000	-.2190	-.1940
	270.000	-.1830	-.1860
	X/LNP	.250	.500 .750
	PHI		
	.000	-.1720	-.1750
	90.000	-.1840	-.1780
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.020	135.000	-.2050	-.1980
	180.000	-.0300	.0750
	225.000	-.2130	-.1810
	270.000	-.1870	-.1750
	X/LNP	.250	.500 .750
	PHI		
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.020	.000	-.1770	-.1790
	90.000	-.1840	-.1830
	135.000	-.1970	-.2040
	180.000	.0420	.0660
	225.000	-.2120	-.1910
	270.000	-.1940	-.1820



DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RB0020) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 SREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.300

PHI	X/LNP	.250	.500	.750
.000		-.2510	-.2530	
90.000		-.2560	-.2510	-.2540
135.000		-.2970	-.2810	-.2620
180.000		-.1130	-.2330	-.2610
225.000		-.2.70	-.2600	-.2570
270.000		-.2590	-.2560	-.2540

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270

PHI	X/LNP	.250	.500	.750
.000		-.2450	-.2470	
90.000		-.2480	-.2460	-.2470
135.000		-.2770	-.2680	-.2520
180.000		-.0820	-.1320	-.2600
225.000		-.2670	-.2650	-.2500
270.000		-.2520	-.2490	-.2470

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220

PHI	X/LNP	.250	.500	.750
.000		-.2450	-.2460	
90.000		-.2480	-.2460	-.2450
135.000		-.2680	-.2600	-.2490
180.000		-.0680	-.1480	-.2570
225.000		-.2650	-.2630	-.2500
270.000		-.2510	-.2490	-.2470

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.130

PHI	X/LNP	.250	.500	.750
.000		-.2280	-.2280	
90.000		-.2310	-.2300	-.2290
135.000		-.2290	-.2420	-.2320
180.000		-.0850	-.1800	-.2310
225.000		-.2370	-.2360	-.2300
270.000		-.2320	-.2290	-.2280

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.960

PHI	X/LNP	.250	.500	.750
.000		-.2370	-.2380	
90.000		-.2430	-.2400	-.2420
135.000		-.2590	-.2530	-.2420
180.000		-.0560	-.1740	-.2450
225.000		-.2670	-.2520	-.2410

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 ORA + S3 + T9 UPPER MPS NOZZLE (R80020)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.960		X/LNF	.250 .500 .750
		PHI	
		270.000	-.2400 -.2360 -.2360
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.010		X/LNF	.250 .500 .750
		PHI	
		.000	-.2400 -.2420
		90.000	-.2460 -.2440 -.2460
		135.000	-.2680 -.2600 -.2470
		180.000	-.0630 -.1090 -.2530
		225.000	-.2770 -.2630 -.2430
		270.000	-.2410 -.2390 -.2370
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.060		X/LNF	.250 .500 .750
		PHI	
		.000	-.2540 -.2540
		90.000	-.2610 -.2570 -.2590
		135.000	-.2820 -.2710 -.2620
		180.000	-.0730 -.1830 -.2680
		225.000	-.2980 -.2770 -.2570
		270.000	-.2550 -.2500 -.2490
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.280		X/LNF	.250 .500 .750
		PHI	
		.000	-.1800 -.1810
		90.000	-.1920 -.1890 -.1840
		135.000	-.1920 -.1830 -.1890
		180.000	-.1230 -.1240 -.1970
		225.000	-.2430 -.1930 -.1860
		270.000	-.1670 -.1840 -.1820
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -0.240		X/LNF	.250 .500 .750
		PHI	
		.000	-.1810 -.1830
		90.000	-.1870 -.1840 -.1830
		135.000	-.2080 -.1870 -.1930
		180.000	-.1670 -.1570 -.1960
		225.000	-.2140 -.1950 -.1870
		270.000	-.1690 -.1870 -.1830
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200		X/LNF	.250 .500 .750
		PHI	
		.000	-.1840 -.1860
		90.000	-.1880 -.1860 -.1860
		135.000	-.2250 -.1990 -.1940
		180.000	-.1610 -.1510 -.2010
		225.000	-.2080 -.1960 -.1960

(R80020)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 OSA + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200	X/LNP	.250	.500 .750
	PHI		
	270.000	-.1910	-.1890 -.1840
	X/LNP	.250	.500 .750
	PHI		
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.130	.000	-.1800	-.1820
	90.000	-.1870	-.1840
	135.000	-.2010	-.1880
	180.000	.0000	-.0470
	225.000	-.2080	-.1960
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950	270.000	-.1840	-.1820
	X/LNP	.250	.500 .750
	PHI		
	90.000	-.1870	-.1880
	135.000	-.1930	-.1910
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.990	180.000	-.2190	-.1950
	225.000	-.0330	-.0490
	270.000	-.2330	-.2010
	X/LNP	.250	.500 .750
	PHI		
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040	.000	-.1810	-.1830
	90.000	-.1870	-.1860
	135.000	-.2120	-.1990
	180.000	-.0820	-.0130
	225.000	-.2270	-.1840
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040	270.000	-.1890	-.1870
	X/LNP	.250	.500 .750
	PHI		
	.000	-.1930	-.1930
	90.000	-.1980	-.1960
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040	135.000	-.2110	-.2110
	180.000	-.0250	.0010
	225.000	-.2150	-.1960
	270.000	-.2130	-.1950
	X/LNP	.250	.500 .750

DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 C2A + S3 + T9 UPPER MPS NOZZLE

(R80021) ( 24 MAY 75 )

## REFERENCE DATA

SREF = 2.4210 50. FT.  
 LREF = 39.8490 INCHES  
 BREF = 39.8490 INCHES  
 SCALE = .0300 SCALE

ALPHAT = 6.000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUDFLR = .000

## PARAMETRIC DATA

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -0.330  
 X/LNP .000 .250 .500 .750  
 PHI

.000 -.2550 -.2560  
 90.000 -.2600 -.2570 -.2590  
 135.000 -.2690 -.2740 -.2650  
 180.000 -.1710 -.2410 -.2670  
 225.000 -.2790 -.2640 -.2620  
 270.000 -.2640 -.2600 -.2590

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -0.290  
 X/LNP .000 .250 .500 .750  
 PHI

.000 -.2510 -.2530  
 90.000 -.2570 -.2540 -.2540  
 135.000 -.2830 -.2710 -.2590  
 180.000 -.1110 -.1670 -.2680  
 225.000 -.2750 -.2720 -.2570  
 270.000 -.2590 -.2550 -.2540

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -0.250  
 X/LNP .000 .250 .500 .750  
 PHI

.000 -.2440 -.2470  
 90.000 -.2500 -.2470 -.2460  
 135.000 -.2680 -.2660 -.2490  
 180.000 -.0760 -.1470 -.2580  
 225.000 -.2670 -.2630 -.2530  
 270.000 -.2530 -.2490 -.2490

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120  
 X/LNP .000 .250 .500 .750  
 PHI

.000 -.2300 -.2320  
 90.000 -.2350 -.2340 -.2330  
 135.000 -.2350 -.2440 -.2340  
 180.000 -.0930 -.2010 -.2340  
 225.000 -.2380 -.2360 -.2350  
 270.000 -.2390 -.2340 -.2310

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.980  
 X/LNP .000 .250 .500 .750  
 PHI

.000 -.2380 -.2400  
 90.000 -.2460 -.2450 -.2460  
 135.000 -.2590 -.2570 -.2470  
 180.000 -.1690 -.1470 -.2490  
 225.000 -.2630 -.2560 -.2430

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 O2A + S3 + T9 UPPER MPS NOZZLE (RBC021)

SECTION ( 1 ) MPS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.980  
X/LNP .250 .500 .750  
PHI  
270.000 -.2410 -.2380 -.2380

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.040  
X/LNP .250 .500 .750  
PHI  
.000 -.2450 -.2460  
90.000 -.2530 -.2510 -.2520  
135.000 -.2750 -.2660 -.2530  
180.000 -.1020 -.1140 -.2580  
225.000 -.2810 -.2630 -.2490  
270.000 -.2480 -.2450 -.2440

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.110  
X/LNP .250 .500 .750  
PHI  
.000 -.2570 -.2590  
90.000 -.2680 -.2640 -.2640  
135.000 -.2820 -.2730 -.2650  
180.000 -.1380 -.1050 -.2760  
225.000 -.2960 -.2690 -.2620  
270.000 -.2590 -.2560 -.2550

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.310  
X/LNP .250 .500 .750  
PHI  
.000 -.1820 -.1830  
90.000 -.1950 -.1870 -.1880  
135.000 -.1970 -.1860 -.1940  
180.000 -.1370 -.1570 -.1990  
225.000 -.2190 -.1950 -.1880  
270.000 -.1890 -.1860 -.1830

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.280  
X/LNP .250 .500 .750  
PHI  
.000 -.1880 -.1920  
90.000 -.1960 -.1925 -.1920  
135.000 -.2050 -.1920 -.1950  
180.000 -.1140 -.1340 -.2120  
225.000 -.2160 -.2140 -.1930  
270.000 -.1930 -.1910 -.1890

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210  
X/LNP .250 .500 .750  
PHI  
.000 -.1880 -.1890  
90.000 -.1890 -.1890 -.1890  
135.000 -.2210 -.2140 -.1960  
180.000 -.1300 -.1660 -.2120  
225.000 -.2190 -.2140 -.1970

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 IAS O2A + S3 + T9 UPPER MP'S NOZZLE (R8C0821)

SECTION ( 1 ) MP'S NOZZLE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210  
X/LNP .250 .500 .750  
PHI  
270.000 -.1930 -.1900 -.1880

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.120  
X/LNP .250 .500 .750  
PHI  
.000 -.1820 -.1830  
90.000 -.1830 -.1830  
135.000 -.1920 -.1840  
180.000 -.0240 -.0740  
225.000 -.2080 -.1970  
270.000 -.1840 -.1830

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.970  
X/LNP .250 .500 .750  
PHI  
.000 -.1870 -.1900  
90.000 -.1950 -.1930  
135.000 -.2160 -.2040  
180.000 -.0959 -.0830  
225.000 -.2300 -.2010  
270.000 -.1940 -.1920

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.020  
X/LNP .250 .500 .750  
PHI  
.000 -.1870 -.1880  
90.000 -.1910 -.1910  
135.000 -.2080 -.2030  
180.000 -.1180 -.0230  
225.000 -.2280 -.1870  
270.000 -.1960 -.1930

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.070  
X/LNP .250 .500 .750  
PHI  
.000 -.1930 -.1940  
90.000 -.1990 -.1980  
135.000 -.2090 -.2110  
180.000 -.0450 -.0100  
225.000 -.2260 -.1940  
270.000 -.2030 -.1970

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 08A + S3 + T9 UPPER MPS NOZZLE

(RBO222) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0390 SCALE

PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUDDLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.360

X/LNP	.250	.500	.750
PHI			
.000	-.2610	-.2630	
90.000	-.2690	-.2670	-.2670
135.000	-.2870	-.2680	-.2680
180.000	-.2170	-.2440	-.2720
225.000	-.2840	-.2660	-.2660
270.000	-.2710	-.2660	-.2640

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.310

X/LNP	.250	.500	.750
PHI			
.000	-.2520	-.2550	
90.000	-.2600	-.2570	-.2570
135.000	-.2740	-.2630	-.2630
180.000	-.1410	-.1700	-.2680
225.000	-.2730	-.2660	-.2610
270.000	-.2630	-.2630	-.2570

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230

X/LNP	.250	.500	.750
PHI			
.000	-.2450	-.2480	
90.000	-.2510	-.2480	-.2480
135.000	-.2590	-.2650	-.2530
180.000	-.1070	-.1510	-.2610
225.000	-.2630	-.2630	-.2530
270.000	-.2520	-.2530	-.2510

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110

X/LNP	.250	.500	.750
PHI			
.000	-.2320	-.2330	
90.000	-.2390	-.2370	-.2340
135.000	-.2360	-.2440	-.2370
180.000	-.1050	-.2220	-.2360
225.000	-.2390	-.2350	-.2350
270.000	-.2410	-.2350	-.2320

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

X/LNP	.250	.500	.750
PHI			
.000	-.2430	-.2450	
90.000	-.2500	-.2490	-.2490
135.000	-.2580	-.2610	-.2490
180.000	-.1080	-.1780	-.2530
225.000	-.2680	-.2590	-.2460

DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A98

ANES 97-707 1A9 OSA + S3 + T9 UPPER MPS NOZZLE

(RR-022)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940  
 X/LNF .250 .500 .750  
 PHI 270.000 -.2490 -.2440 -.2420

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.160  
 X/LNF .250 .500 .750  
 PHI .000 -.2510 -.2540  
 90.000 -.2590 -.2570 -.2570  
 135.000 -.2750 -.2670 -.2570  
 180.000 -.1490 -.2130 -.2630  
 225.000 -.2860 -.2630 -.2570  
 270.000 -.2570 -.2530 -.2510

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.120  
 X/LNF .250 .500 .750  
 PHI .000 -.2640 -.2650  
 90.000 -.2730 -.2710 -.2690  
 135.000 -.2880 -.2740 -.2710  
 180.000 -.2120 -.1740 -.2750  
 225.000 -.3160 -.2650 -.2680  
 270.000 -.2670 -.2670 -.2650

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.330  
 X/LNF .250 .500 .750  
 PHI .000 -.1820 -.1830  
 90.000 -.1990 -.1860 -.1840  
 135.000 -.1950 -.1770 -.1940  
 180.000 -.1570 -.1630 -.1960  
 225.000 -.2140 -.1910 -.1870  
 270.000 -.1880 -.1860 -.1830

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.280  
 X/LNF .250 .500 .750  
 PHI .000 -.1860 -.1880  
 90.000 -.1980 -.1940 -.1890  
 135.000 -.2140 -.1830 -.1980  
 180.000 -.1860 -.1730 -.2140  
 225.000 -.2030 -.2040 -.1910  
 270.000 -.1910 -.1890 -.1860

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220  
 X/LNF .250 .500 .750  
 PHI .000 -.1940 -.1920  
 90.000 -.1980 -.1930 -.1930  
 135.000 -.2140 -.2110 -.1990  
 180.000 -.1560 -.1770 -.2130  
 225.000 -.2180 -.2150 -.1980



DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AVES 97-707 1A9 O2A + S3 + T9 UPPER MPS NOZZLE (RBC022)

SECTION ( 1 ) MPS NOZZLE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220  
X/LNP .250 .500 .750  
PHI  
270.000 -.1940 -.1930 -.1910

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.110  
X/LNP .250 .500 .750  
PHI  
.000  
90.000 -.1890 -.1860  
135.000 -.1880 -.1880  
180.000 -.0340 -.0890  
225.000 -.2110 -.1970  
270.000 -.1890 -.1890

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 4.000  
X/LNP .250 .500 .750  
PHI  
.000  
90.000 -.1890 -.1910  
135.000 -.1940 -.1930  
180.000 -.2120 -.2070  
225.000 -.0880 -.0780  
270.000 -.2140 -.2020

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.050  
X/LNP .250 .500 .750  
PHI  
.000  
90.000 -.1840 -.1860  
135.000 -.1890 -.1880  
180.000 -.2030 -.2040  
225.000 -.1310 -.0360  
270.000 -.2240 -.1810

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.110  
X/LNP .250 .500 .750  
PHI  
.000  
90.000 -.1890 -.1920  
135.000 -.1950 -.1940  
180.000 -.2060 -.2070  
225.000 -.0950 .0170  
270.000 -.2200 -.1890

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AVES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RBC023) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.1300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -8.000 ORBINC = .000  
RUDDER = 15.000 ELEVON = .000  
RUDDER = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.400  
X/LNF .250 .500 .750  
PHI  
.000  
90.000 -21.70 -21.60 -21.20  
135.000 -21.70 -21.50 -21.20  
180.000 -22.50 -22.50 -23.70  
225.000 -26.60 -23.50 -23.50  
270.000 -1.610 -1.030 -2.350  
225.000 -2.590 -2.470 -2.180  
270.000 -2.250 -2.250 -2.180

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.360

X/LNF .250 .500 .750  
PHI  
.000  
90.000 -21.40 -21.20 -21.30  
135.000 -21.60 -21.20 -21.30  
180.000 -26.60 -22.40 -23.60  
225.000 -1.130 -1.140 -2.330  
270.000 -2.480 -2.480 -2.150  
225.000 -2.220 -2.160 -2.120  
270.000 -2.220 -2.160 -2.120

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.290

X/LNF .250 .500 .750  
PHI  
.000  
90.000 -22.60 -22.40 -22.60  
135.000 -22.30 -22.40 -23.90  
180.000 -28.30 -23.40 -23.90  
225.000 .0120 -1.030 -2.420  
270.000 -2.570 -2.580 -2.350  
225.000 -2.340 -2.290 -2.270  
270.000 -2.340 -2.290 -2.270

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -3.170

X/LNF .250 .500 .750  
PHI  
.000  
90.000 -2.410 -2.410 -2.420  
135.000 -2.460 -2.450 -2.420  
180.000 -2.730 -2.560 -2.580  
225.000 .1980 -1.410 -2.550  
270.000 -2.650 -2.530 -2.550  
225.000 -2.450 -2.450 -2.420  
270.000 -2.450 -2.450 -2.420

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

X/LNF .250 .500 .750  
PHI  
.000  
90.000 -2.160 -2.160 -2.220  
135.000 -2.230 -2.230 -2.220  
180.000 -2.390 -2.470 -2.240  
225.000 -1.440 -1.020 -2.360  
270.000 -2.270 -2.270 -2.340  
225.000 -2.270 -2.270 -2.340  
270.000 -2.270 -2.270 -2.340

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 149 QEA + S3 + T9 UPPER MPS NOZZLE (RB0023)

SECTION ( 1 ) MPS NOZZLE	DEPENDENT VARIABLE CP				
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940	X/LNP	.250	.500	.750	
	PHI				
	270.000	-.2180	-.2180	-.2180	-.2180
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 8.060	X/LNP	.250	.500	.750	
	PHI				
	.000	-.2150	-.2130		
	90.000	-.2240	-.2190	-.2170	
	135.000	-.2640	-.2440	-.2180	
	180.000	-.0190	-.0190	-.2370	
	225.000	-.2860	-.2300	-.2330	
	270.000	-.2160	-.2160	-.2070	
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.380	X/LNP	.250	.500	.750	
	PHI				
	.000	-.1480	-.1520		
	90.000	-.1650	-.1540	-.1480	
	135.000	-.0860	-.1680	-.1700	
	180.000	.0890	-.1270	-.1680	
	225.000	-.2090	-.1780	-.1670	
	270.000	-.1610	-.1560	-.1510	
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330	X/LNP	.250	.500	.750	
	PHI				
	.000	-.1630	-.1680		
	90.000	-.1760	-.1710	-.1630	
	135.000	-.1070	-.1940	-.1860	
	180.000	.1030	-.0430	-.1770	
	225.000	-.2110	-.1840	-.1890	
	270.000	-.1750	-.1710	-.1650	
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280	X/LNP	.250	.500	.750	
	PHI				
	.000	-.1580	-.1590		
	90.000	-.1670	-.1650	-.1570	
	135.000	-.1490	-.1780	-.1770	
	180.000	.2070	.0330	-.1690	
	225.000	-.1990	-.1680	-.1780	
	270.000	-.1660	-.1640	-.1580	
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170	X/LNP	.250	.500	.750	
	PHI				
	.000	-.1570	-.1590		
	90.000	-.1610	-.1590	-.1590	
	135.000	-.2260	-.1680	-.1790	
	180.000	.1620	.0530	-.1670	
	225.000	-.2050	-.1720	-.1740	

(RBC023)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000    BETAT ( 4 ) = -.170	X/LNP	.250	.500
	PHI		
	270.000	-.1630	-.1610
			-.1570
MACH ( 2 ) = 2.000    BETAT ( 5 ) = 3.930	X/LNP	.250	.500
	PHI		
	.000	-.1630	-.1670
	90.000	-.1700	-.1730
	135.000	-.2190	-.1860
MACH ( 2 ) = 2.000    BETAT ( 6 ) = 5.980	X/LNP	.250	.500
	PHI		
	.000	-.1630	-.1690
	90.000	-.1800	-.1740
	135.000	-.2260	-.2510
MACH ( 2 ) = 2.000    BETAT ( 7 ) = 8.040	X/LNP	.250	.500
	PHI		
	.000	-.1580	-.1630
	90.000	-.1690	-.1660
	135.000	-.2220	-.1920

DATE 21 SEP 73

REFUGATED PRESSURE DATA - 1A98

AWES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RBC024) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500  
RUDDER = 15.000 ELEVON = .000  
RUOFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 26.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.330  
X/LNP .250 .500 .750  
PHI  
.000 -.2290 -.2310  
90.000 -.2290 -.2250 -.2310  
135.000 -.2670 -.2380 -.2450  
180.000 -.0980 -.0160 -.2500  
225.000 -.2750 -.2540 -.2350  
270.000 -.2410 -.2350 -.2330

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.290

X/LNP .250 .500 .750  
PHI  
.000 -.2270 -.2260  
90.000 -.2270 -.2240 -.2270  
135.000 -.2750 -.2370 -.2430  
180.000 -.0490 -.0520 -.2460  
225.000 -.2630 -.2530 -.2310  
270.000 -.2360 -.2310 -.2310

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

X/LNP .250 .500 .750  
PHI  
.000 -.2310 -.2310  
90.000 -.2310 -.2310 -.2320  
135.000 -.2740 -.2380 -.2410  
180.000 -.0460 -.0480 -.2430  
225.000 -.2570 -.2540 -.2360  
270.000 -.2380 -.2350 -.2350

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -1.150

X/LNP .250 .500 .750  
PHI  
.000 -.2420 -.2430  
90.000 -.2490 -.2460 -.2450  
135.000 -.2650 -.2560 -.2560  
180.000 .0270 -.0780 -.2570  
225.000 -.2640 -.2550 -.2510  
270.000 -.2470 -.2450 -.2420

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

X/LNP .250 .500 .750  
PHI  
.000 -.2280 -.2260  
90.000 -.2380 -.2330 -.2340  
135.000 -.2530 -.2510 -.2360  
180.000 -.0860 -.0440 -.2420  
225.000 -.2710 -.2420 -.2390

DATE 21 SEP 75  
 TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE  
 (RB0024)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940	X/LNP	.250	.500 .750
	PHI		
	270.000	-.2270	-.2260 -1.2270
	X/LNP	.250	.500 .750
	PHI		
	.000	-.2270	-.2260
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.980	90.000	-.2360	-.2350 -1.2320
	135.000	-.2590	-.2610 -1.2350
	180.000	-.0610	-.1490 -1.2490
	225.000	-.2870	-.2470 -1.2500
	270.000	-.2300	-.2270 -1.2240
	X/LNP	.250	.500 .750
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.030	PHI		
	.000	-.2230	-.2230
	90.000	-.2340	-.2310 -1.2300
	135.000	-.2770	-.2530 -1.2310
	180.000	-.0520	-.0100 -1.2460
	225.000	-.2870	-.2410 -1.2440
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.310	270.000	-.2260	-.2230 -1.2190
	X/LNP	.250	.500 .750
	PHI		
	.000	-.1980	-.1630
	90.000	-.1670	-.1590 -1.1570
	135.000	-.1380	-.1480 -1.1650
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.270	180.000	.0270	.0620 -1.1790
	225.000	-.1990	-.1940 -1.1660
	270.000	-.1670	-.1650 -1.1610
	X/LNP	.250	.500 .750
	PHI		
	.000	-.1670	-.1720
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230	90.000	-.1770	-.1710 -1.1650
	135.000	-.1510	-.1740 -1.1720
	180.000	.0490	-.0400 -1.1840
	225.000	-.2100	-.1820 -1.1870
	270.000	-.1760	-.1740 -1.1690
	X/LNP	.250	.500 .750
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230	PHI		
	.000	-.1720	-.1750
	90.000	-.1800	-.1750 -1.1720
	135.000	-.1840	-.1830 -1.1820
	180.000	.1100	-.0210 -1.1840
	225.000	-.2480	-.1830 -1.1890

DATE 28 SEP 77 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 OCA + S3 + T9 UPPER MPS NOZZLE (50024)

SECTION ( 1 ) MPS NOZZLE  
DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230  
X/LNF .250 .500 .750  
PHI  
270.000 -.1780 -.1770 -.1720

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.160  
X/LNF .250 .500 .750  
PHI  
.000 -.1750 -.1720  
90.000 -.1740 -.1720 -.1730  
135.000 -.2270 -.1810 -.1890  
180.000 .0940 .0280 -.1780  
225.000 -.2070 -.1860 -.1820  
270.000 -.1750 -.1730 -.1680

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.920  
X/LNF .250 .500 .750  
PHI  
.000 -.1750 -.1790  
90.000 -.1860 -.1820 -.1800  
135.000 -.2250 -.1950 -.1940  
180.000 .0510 .0480 -.1860  
225.000 -.2010 -.1970 -.1940  
270.000 -.1850 -.1810 -.1740

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.960  
X/LNF .250 .500 .750  
PHI  
.000 -.1720 -.1780  
90.000 -.1820 -.1780 -.1780  
135.000 -.2260 -.1960 -.1890  
180.000 .0440 .0230 -.1940  
225.000 -.1790 -.2010 -.1980  
270.000 -.1880 -.1800 -.1730

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.010  
X/LNF .250 .500 .750  
PHI  
.000 -.1670 -.1710  
90.000 -.1760 -.1740 -.1730  
135.000 -.2140 -.2030 -.1770  
180.000 .0510 .0640 -.1880  
225.000 -.1580 -.1860 -.1920  
270.000 -.1800 -.1700 -.1630

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 OEA + S3 + T9 UPPER MPS NOZZLE

(RBC025) ( 24 MAY 73 )

REFERENCE DATA

XREF = 2.4210 SQ. FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUDDLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.320

X/LNP	.250	.500	.750
PHI	.000	.000	.000
	-.2490	-.2480	-.2480
	-.2490	-.2450	-.2480
	-.2920	-.2670	-.2560
	-.0850	-.0950	-.2650
	-.2810	-.2670	-.2540
	-.2560	-.2510	-.2510

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270

X/LNP	.250	.500	.750
PHI	.000	.000	.000
	-.2330	-.2360	-.2370
	-.2360	-.2340	-.2370
	-.2650	-.2500	-.2430
	-.0080	-.0780	-.2540
	-.2620	-.2620	-.2410
	-.2420	-.2380	-.2380

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

X/LNP	.250	.500	.750
PHI	.000	.000	.000
	-.2360	-.2380	-.2390
	-.2370	-.2370	-.2390
	-.2650	-.2460	-.2440
	-.0860	-.1400	-.2480
	-.2640	-.2490	-.2420
	-.2440	-.2410	-.2400

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.130

X/LNP	.250	.500	.750
PHI	.000	.000	.000
	-.2370	-.2370	-.2370
	-.2420	-.2410	-.2410
	-.2470	-.2540	-.2470
	-.0380	-.1260	-.2510
	-.2560	-.2540	-.2430
	-.2420	-.2380	-.2370

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.950

X/LNP	.250	.500	.750
PHI	.000	.000	.000
	-.2370	-.2370	-.2370
	-.2450	-.2420	-.2430
	-.2610	-.2530	-.2440
	-.1130	-.0880	-.2510
	-.2720	-.2540	-.2430



DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

(RBC025)

AMES 97-757 1A9 O2A + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE  
DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.950  
X/LNP .250 .500 .750  
PHI  
270.000 -2360 -2340 -2360

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990  
X/LNP .250 .500 .750  
PHI  
90.000 -2380 -2400  
135.000 -2480 -2450 -2470  
180.000 -2640 -2730 -2490  
225.000 -1510 -1020 -2590  
270.000 -2880 -2610 -2540  
270.000 -2420 -2380 -2360

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.040  
X/LNP .250 .500 .750  
PHI  
90.000 -2390 -2410  
135.000 -2500 -2460 -2470  
180.000 -2750 -2630 -2490  
225.000 -1660 -1460 -2590  
270.000 -2900 -2590 -2490  
270.000 -2410 -2370 -2350

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.290  
X/LNP .250 .500 .750  
PHI  
90.000 -1720 -1720  
135.000 -1730 -1710 -1730  
180.000 -1880 -1790 -1770  
225.000 -1030 -1490 -1870  
270.000 -1910 -1850 -1740  
270.000 -1780 -1750 -1710

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.290  
X/LNP .250 .500 .750  
PHI  
90.000 -1710 -1740  
135.000 -1770 -1730 -1720  
180.000 -1860 -1780 -1790  
225.000 -1020 -1490 -1890  
270.000 -2050 -1960 -1780  
270.000 -1790 -1770 -1730

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210  
X/LNP .250 .500 .750  
PHI  
90.000 -1770 -1790  
135.000 -1830 -1790 -1790  
180.000 -2030 -1890 -1890  
225.000 -1440 -1620 -1950  
270.000 -2190 -1890 -1910

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98 (RECORDS)

AMES 97-707 1AS OEA + S3 + T9 UPPER NPS NOZZLE

SECTION ( 1 ) NPS NOZZLE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210  
X/LNP .250 .500 .750  
PHI  
270.000 -.1830 -.1820 -.1780

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.140  
X/LNP .250 .500 .750  
PHI  
.000 -.1760 -.1780  
90.000 -.1820 -.1810 -.1790  
135.000 -.2210 -.1880 -.1940  
180.000 .0440 .0220 -.1880  
225.000 -.2180 -.1920 -.1850  
270.000 -.1810 -.1790 -.1760

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950  
X/LNP .250 .500 .750  
PHI  
.000 -.1820 -.1840  
90.000 -.1890 -.1860 -.1850  
135.000 -.2280 -.1940 -.1960  
180.000 .0240 -.0030 -.1950  
225.000 -.2170 -.2110 -.1960  
270.000 -.1890 -.1850 -.1790

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.020  
X/LNP .250 .500 .750  
PHI  
.000 -.1760 -.1780  
90.000 -.1840 -.1820 -.1830  
135.000 -.1990 -.1980 -.1830  
180.000 .0490 .0550 -.1980  
225.000 -.2140 -.1890 -.1980  
270.000 -.1920 -.1810 -.1740

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 C8A + S3 + T9 UPPER MPS NOZZLE

(RBC026) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMR = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.300

DEPENDENT VARIABLE CP

X/LNP	.250	.500	.750
PHI			
.000	-.2530	-.2540	
90.000	-.2570	-.2520	-.2550
135.000	-.2980	-.2790	-.2660
180.000	-.0790	-.2270	-.2640
225.000	-.2860	-.2670	-.2600
270.000	-.2590	-.2570	-.2570

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.260

X/LNP	.250	.500	.750
PHI			
.000	-.2430	-.2460	
90.000	-.2460	-.2440	-.2460
135.000	-.2730	-.2570	-.2570
180.000	-.1420	-.1980	-.2590
225.000	-.2720	-.2650	-.2510
270.000	-.2520	-.2470	-.2460

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220

X/LNP	.250	.500	.750
PHI			
.000	-.2420	-.2430	
90.000	-.2440	-.2440	-.2430
135.000	-.2610	-.2540	-.2480
180.000	-.1430	-.1490	-.2550
225.000	-.2630	-.2590	-.2480
270.000	-.2490	-.2450	-.2440

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120

X/LNP	.250	.500	.750
PHI			
.000	-.2320	-.2320	
90.000	-.2350	-.2340	-.2350
135.000	-.2320	-.2470	-.2370
180.000	-.1780	-.1710	-.2370
225.000	-.2410	-.2430	-.2350
270.000	-.2360	-.2340	-.2320

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.960

X/LNP	.250	.500	.750
PHI			
.000	-.2460	-.2480	
90.000	-.2550	-.2510	-.2520
135.000	-.2700	-.2670	-.2530
180.000	-.1700	-.1360	-.2580
225.000	-.2800	-.2620	-.2500

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUOFLR = .000

(RBC026)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 IAS 02A + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.96U	X/LNP	.75U
		PHI	
		270.00U	-.248U - .246U - .244U
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.01U	X/LNP	.75U
		PHI	
		.00U	-.253U - .251U - .250U
		90.00U	-.261U - .259U - .260U
		135.00U	-.281U - .277U - .282U
		180.00U	-.087U - .082U - .069U
		225.00U	-.294U - .279U - .262U
		270.00U	-.255U - .252U - .251U
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.09U	X/LNP	.75U
		PHI	
		.00U	-.251U - .252U - .259U
		90.00U	-.262U - .259U - .260U
		135.00U	-.279U - .268U - .267U
		180.00U	-.103U - .064U - .259U
		225.00U	-.295U - .279U - .249U
		270.00U	-.254U - .249U - .249U
MACH ( 2 ) = 2.00U	BETAT ( 1 ) = -8.28U	X/LNP	.75U
		PHI	
		.00U	-.177U - .178U - .182U
		90.00U	-.189U - .183U - .185U
		135.00U	-.194U - .172U - .193U
		180.00U	-.095U - .023U - .182U
		225.00U	-.214U - .188U - .179U
		270.00U	-.186U - .183U - .179U
MACH ( 2 ) = 2.00U	BETAT ( 2 ) = -6.23U	X/LNP	.75U
		PHI	
		.00U	-.184U - .181U - .182U
		90.00U	-.184U - .182U - .194U
		135.00U	-.203U - .184U - .196U
		180.00U	-.069U - .055U - .186U
		225.00U	-.207U - .195U - .182U
		270.00U	-.188U - .185U - .182U
MACH ( 2 ) = 2.00U	BETAT ( 3 ) = -4.20U	X/LNP	.75U
		PHI	
		.00U	-.183U - .184U - .185U
		90.00U	-.186U - .185U - .192U
		135.00U	-.221U - .195U - .199U
		180.00U	-.049U - .046U - .193U
		225.00U	-.211U - .198U - .193U

DATE 21 SEP 70

ABLATED PRESSURE DATA - 1A98  
 AMES 97-7.7 1A9 OCA + S3 + T9 UPPER MPS NOZZLE

(RBOC26)

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200  
 X/LNF .250 .500 .750  
 PHI 270.000 -.1890 -.1870 -.1840

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -3.120  
 X/LNF .250 .500 .750  
 PHI .000 -.1820 -.1830  
 90.000 -.1860 -.1840 -.1850  
 135.000 -.2030 -.1870 -.1970  
 180.000 .0140 -.0580 -.1920  
 225.000 -.2080 -.1970 -.1870  
 270.000 -.1850 -.1830 -.1810

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950  
 X/LNF .250 .500 .750  
 PHI .000 -.1940 -.1950  
 90.000 -.2120 -.1980 -.1990  
 135.000 -.2180 -.2110 -.2020  
 180.000 -.0230 -.1130 -.2060  
 225.000 -.2390 -.2180 -.2160  
 270.000 -.1980 -.1970 -.1910

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.990  
 X/LNF .250 .500 .750  
 PHI .000 -.1850 -.1870  
 90.000 -.1910 -.1910 -.1920  
 135.000 -.2130 -.2050 -.1920  
 180.000 -.0750 -.0230 -.2030  
 225.000 -.2290 -.1960 -.2020  
 270.000 -.1940 -.1940 -.1850

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.030  
 X/LNF .250 .500 .750  
 PHI .000 -.1910 -.1930  
 90.000 -.1980 -.1970 -.1970  
 135.000 -.2130 -.2110 -.1970  
 180.000 -.0300 -.0190 -.2100  
 225.000 -.2140 -.1990 -.2070  
 270.000 -.2030 -.1960 -.1880

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1498

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AMES 97-737 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RBC027) ( 24 MAY 73 )

## REFERENCE DATA

SREP = 2.4216 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHAT = 6.0000 ORBINC = .0000  
 RUDDER = 15.0000 ELEVON = .0000  
 RUDDLR = .0000

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.330

X/LNP	.250	.500	.750
PHI			
.000	-.2610	-.2610	
90.000	-.2640	-.2610	-.2630
135.000	-.2930	-.2780	-.2710
180.000	-.1650	-.2400	-.2730
225.000	-.2890	-.2730	-.2670
270.000	-.2680	-.2650	-.2640

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270

X/LNP	.250	.500	.750
PHI			
.000	-.2520	-.2540	
90.000	-.2570	-.2550	-.2560
135.000	-.2780	-.2690	-.2610
180.000	-.1850	-.1440	-.2690
225.000	-.2800	-.2720	-.2570
270.000	-.2610	-.2570	-.2550

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230

X/LNP	.250	.500	.750
PHI			
.000	-.2420	-.2450	
90.000	-.2450	-.2430	-.2440
135.000	-.2610	-.2610	-.2510
180.000	-.1560	-.1420	-.2580
225.000	-.2670	-.2590	-.2500
270.000	-.2510	-.2480	-.2470

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110

X/LNP	.250	.500	.750
PHI			
.000	-.2340	-.2360	
90.000	-.2410	-.2410	-.2370
135.000	-.2360	-.2530	-.2390
180.000	-.1850	-.1930	-.2410
225.000	-.2440	-.2450	-.2400
270.000	-.2420	-.2410	-.2370

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990

X/LNP	.250	.500	.750
PHI			
.000	-.2470	-.2490	
90.000	-.2560	-.2540	-.2550
135.000	-.2680	-.2720	-.2560
180.000	-.1270	-.1320	-.2610
225.000	-.2770	-.2660	-.2540

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A99  
 AMES 97-707 1A9 OEA + S3 + T9 UPPER MPS NOZZLE (RBO027)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990		X/LNP	.250 .500 .750
		PHI	
		270.000	-.2510 -.2480 -.2480
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000		X/LNP	.250 .500 .750
		PHI	
		.000	-.2530 -.2550
		90.000	-.2600 -.2580 -.2590
		135.000	-.2780 -.2750 -.2660
		180.000	-.1160 -.1940 -.2680
		225.000	-.2880 -.2700 -.2600
		270.000	-.2550 -.2530 -.2520
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.090		X/LNP	.250 .500 .750
		PHI	
		.000	-.2550 -.2570
		90.000	-.2660 -.2630 -.2610
		135.000	-.2810 -.2680 -.2620
		180.000	-.1530 -.1010 -.2700
		225.000	-.2930 -.2690 -.2600
		270.000	-.2570 -.2540 -.2530
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.300		X/LNP	.250 .500 .750
		PHI	
		.000	-.1800 -.1820
		90.000	-.1960 -.1870 -.1860
		135.000	-.1920 -.1760 -.1880
		180.000	-.1220 -.1610 -.1960
		225.000	-.2160 -.1940 -.1860
		270.000	-.1870 -.1850 -.1820
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250		X/LNP	.250 .500 .750
		PHI	
		.000	-.1840 -.1850
		90.000	-.1930 -.1880 -.1860
		135.000	-.1970 -.1820 -.1980
		180.000	-.1860 -.1710 -.1990
		225.000	-.2150 -.2120 -.1890
		270.000	-.1900 -.1880 -.1850
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200		X/LNP	.250 .500 .750
		PHI	
		.000	-.1860 -.1870
		90.000	-.1880 -.1880 -.1880
		135.000	-.2250 -.1970 -.1960
		180.000	-.1910 -.1670 -.2040
		225.000	-.2100 -.1990 -.1960

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A9B

PAGE 464

AMES 97-707 1A9 CEA + S3 + T9 UPPER MPS NOZZLE

(R50027)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.0000 BETAT ( 3 ) = -4.250

X/LNP	.250	.500	.750
PHI			
270.000	-.1910	-.1090	-.1850

MACH ( 2 ) = 2.0000 BETAT ( 4 ) = -.120

X/LNP	.250	.500	.750
PHI			
.000	-.1840	-.1850	
90.000	-.1870	-.1870	-.1860
135.000	-.1980	-.1830	-.1970
180.000	-.1240	-.1890	-.1960
225.000	-.2140	-.2030	-.1880
270.000	-.1870	-.1870	-.1830

MACH ( 2 ) = 2.0000 BETAT ( 5 ) = 3.970

X/LNP	.250	.500	.750
PHI			
.000	-.1940	-.1960	
90.000	-.2020	-.1990	-.2010
135.000	-.2200	-.2130	-.2020
180.000	-.1410	-.1310	-.2080
225.000	-.2380	-.2190	-.2080
270.000	-.2010	-.1990	-.1940

MACH ( 2 ) = 2.0000 BETAT ( 6 ) = 6.030

X/LNP	.250	.500	.750
PHI			
.000	-.1920	-.1920	
90.000	-.1960	-.1960	-.1960
135.000	-.2160	-.2110	-.1980
180.000	-.1050	-.1080	-.2070
225.000	-.2310	-.2170	-.2060
270.000	-.1990	-.1950	-.1890

MACH ( 2 ) = 2.0000 BETAT ( 7 ) = 8.070

X/LNP	.250	.500	.750
PHI			
.000	-.1950	-.1970	
90.000	-.2010	-.2010	-.2010
135.000	-.2140	-.2140	-.2010
180.000	-.0560	-.1460	-.2130
225.000	-.2230	-.1980	-.2070
270.000	-.2050	-.2040	-.1920



(RUC029) ( 24 MAY 73

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AVES 97-707 1A9 Q2A + S3 + T9 UPPER MPS NOZZLE

PARAMETRIC DATA

ALPHAT = 8.0000 ORBINC = .0000  
 RUDDER = 15.0000 ELEVON = .0000  
 RUDDLR = .0000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .00000 SCALE

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.350	X/LNF	.250	.500	.750
		PHI			
		.100	-.2650	-.2670	
		90.100	-.2740	-.2710	-.2710
		135.100	-.2920	-.2740	-.2720
		180.100	-.2170	-.2500	-.2770
		225.100	-.2920	-.2730	-.2720
		270.100	-.2740	-.2710	-.2690

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.300

X/LNF	.250	.500	.750
PHI			
.100	-.2540	-.2570	
90.100	-.2610	-.2590	-.2570
135.100	-.2720	-.2630	-.2610
180.100	-.1220	-.1740	-.2700
225.100	-.2760	-.2670	-.2610
270.100	-.2640	-.2640	-.2590

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.250

X/LNF	.250	.500	.750
PHI			
.100	-.2440	-.2470	
90.100	-.2500	-.2470	-.2470
135.100	-.2510	-.2640	-.2560
180.100	-.1670	-.1540	-.2610
225.100	-.2660	-.2630	-.2540
270.100	-.2520	-.2510	-.2510

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110

X/LNF	.250	.500	.750
PHI			
.100	-.2360	-.2360	
90.100	-.2420	-.2390	-.2390
135.100	-.2380	-.2510	-.2410
180.100	-.1140	-.2170	-.2410
225.100	-.2450	-.2420	-.2390
270.100	-.2430	-.2390	-.2380

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 4.000

X/LNF	.250	.500	.750
PHI			
.100	-.2510	-.2520	
90.100	-.2590	-.2570	-.2580
135.100	-.2630	-.2730	-.2590
180.100	-.1110	-.1440	-.2630
225.100	-.2780	-.2640	-.2550

(RSC028)

## DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 ORA + S3 + T9 UPPER MPS NOZZLE

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 4.000  
 X/LNP .250 .500 .750  
 PHI 270.000 -0.2540 -0.2510 -0.2490

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000  
 X/LNP .250 .500 .750  
 PHI .000 -0.2550 -0.2580  
 90.000 -0.2650 -0.2630 -0.2630  
 135.000 -0.2630 -0.2720 -0.2630  
 180.000 -0.1580 -0.1360 -0.2710  
 225.000 -0.2900 -0.2670 -0.2630  
 270.000 -0.2610 -0.2590 -0.2560

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.130  
 X/LNP .250 .500 .750  
 PHI .000 -0.2600 -0.2590  
 90.000 -0.2700 -0.2650 -0.2630  
 135.000 -0.2840 -0.2680 -0.2640  
 180.000 -0.2140 -0.1500 -0.2710  
 225.000 -0.3000 -0.2630 -0.2630  
 270.000 -0.2640 -0.2610 -0.2590

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.320  
 X/LNP .250 .500 .750  
 PHI .000 -0.1790 -0.1810  
 90.000 -0.1940 -0.1850 -0.1830  
 135.000 -0.1920 -0.1690 -0.1890  
 180.000 -0.1480 -0.1670 -0.1940  
 225.000 -0.2160 -0.1880 -0.1850  
 270.000 -0.1860 -0.1850 -0.1810

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260  
 X/LNP .250 .500 .750  
 PHI .000 -0.1860 -0.1870  
 90.000 -0.1990 -0.1940 -0.1890  
 135.000 -0.2140 -0.1840 -0.1960  
 180.000 -0.1800 -0.1680 -0.1990  
 225.000 -0.2130 -0.2020 -0.1910  
 270.000 -0.1900 -0.1880 -0.1860

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210  
 X/LNP .250 .500 .750  
 PHI .000 -0.1860 -0.1880  
 90.000 -0.1930 -0.1890 -0.1880  
 135.000 -0.1950 -0.1980 -0.1980  
 180.000 -0.1410 -0.1750 -0.1990  
 225.000 -0.2070 -0.2000 -0.1940

DATE 21 SEP 73

AMES 97-707 1A9 Q2A + S3 + T9 UPPER MPS NOZZLE

(R80028)

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.144	BETAT ( 3 ) = -4.210	X/LNF	.250	.500	.750
		PHI			
		270.144	-.1910	-.1890	-.1860
MACH ( 2 ) = 2.044	BETAT ( 4 ) = -.110	X/LNF	.250	.500	.750
		PHI			
		.144	-.1880	-.1900	
		90.144	-.1940	-.1890	-.1940
		135.144	-.2040	-.1870	-.1990
		180.144	-.0150	-.1950	-.2040
		225.144	-.2140	-.2020	-.1920
		270.144	-.1920	-.1910	-.1870
MACH ( 2 ) = 2.144	BETAT ( 5 ) = 3.990	X/LNF	.250	.500	.750
		PHI			
		.144	-.1990	-.2040	
		90.144	-.2040	-.2020	-.2030
		135.144	-.2220	-.2150	-.2070
		180.144	-.0840	-.1080	-.2110
		225.144	-.2210	-.2140	-.2130
		270.144	-.2070	-.2020	-.1970
MACH ( 2 ) = 2.044	BETAT ( 6 ) = 6.050	X/LNF	.250	.500	.750
		PHI			
		.144	-.1890	-.1910	
		90.144	-.1950	-.1940	-.1940
		135.144	-.2130	-.2080	-.1950
		180.144	-.1190	-.1040	-.2050
		225.144	-.2250	-.1950	-.2070
		270.144	-.2020	-.1940	-.1880
MACH ( 2 ) = 2.144	BETAT ( 7 ) = 8.110	X/LNF	.250	.500	.750
		PHI			
		.144	-.1920	-.1930	
		90.144	-.1970	-.1970	-.1980
		135.144	-.2070	-.2100	-.1990
		180.144	-.1090	-.1090	-.2060
		225.144	-.2210	-.1940	-.2010
		270.144	-.2040	-.1940	-.1880

(RBC011) ( 24 MAY 73 )

PARAMETRIC DATA

BETAT = .000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUFLR = .000

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 OEA + S3 + T9 OMS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XGRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YGRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZGRP = .0000 INCHES  
 SCALE = .0350 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE

MACH ( 1 ) = 1.555 ALPHAT( 1 ) = -8.400  
 X/LNM .200 .400  
 PHI  
 135.000 .1380  
 180.000 .3560 -.0680  
 225.000 -.2590

MACH ( 1 ) = 1.555 ALPHAT( 2 ) = -6.330  
 X/LNM .200 .400  
 PHI  
 135.000 .0720  
 180.000 .2790 -.1020  
 225.000 -.2630

MACH ( 1 ) = 1.555 ALPHAT( 3 ) = -4.250  
 X/LNM .200 .400  
 PHI  
 135.000 .0370  
 180.000 .2040 -.1380  
 225.000 -.2610

MACH ( 1 ) = 1.555 ALPHAT( 4 ) = -2.190  
 X/LNM .200 .400  
 PHI  
 135.000 .0460  
 180.000 .1680 -.1540  
 225.000 -.2620

MACH ( 1 ) = 1.555 ALPHAT( 5 ) = -.120  
 X/LNM .200 .400  
 PHI  
 135.000 .0310  
 180.000 .1220 -.1680  
 225.000 -.2630

MACH ( 1 ) = 1.555 ALPHAT( 6 ) = 1.950  
 X/LNM .200 .400  
 PHI  
 135.000 -.1290  
 180.000 .0550 -.1840  
 225.000 -.2560

MACH ( 1 ) = 1.555 ALPHAT( 7 ) = 4.010  
 X/LNM .200 .400  
 PHI  
 135.000 -.1430  
 180.000 -.1280 -.2180  
 225.000 -.2910

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 Q2A + S3 + T9 QMS NOZZLE (RBOE01)

## SECTION ( 1 ) QMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 ALPHAT( 8 ) = 6.060 X/LNM .200 .400  
 PHI  
 135.000 -.0830  
 180.000 -.0390 -.1960  
 225.000 -.2570

MACH ( 1 ) = 1.555 ALPHAT( 9 ) = 8.130 X/LNM .200 .400  
 PHI  
 135.000 -.0980  
 180.000 -.0740 -.2150  
 225.000 -.2480

MACH ( 2 ) = 2.000 ALPHAT( 1 ) = -8.360 X/LNM .200 .400  
 PHI  
 135.000 .3910  
 180.000 .4550 .3520  
 225.000 -.0630

MACH ( 2 ) = 2.000 ALPHAT( 2 ) = -6.310 X/LNM .200 .400  
 PHI  
 135.000 .3650  
 180.000 .4340 .2920  
 225.000 -.0880

MACH ( 2 ) = 2.000 ALPHAT( 3 ) = -4.250 X/LNM .200 .400  
 PHI  
 135.000 .3460  
 180.000 .3980 .2400  
 225.000 -.1070

MACH ( 2 ) = 2.000 ALPHAT( 4 ) = -2.210 X/LNM .200 .400  
 PHI  
 135.000 .3280  
 180.000 .3660 .1970  
 225.000 -.1230

MACH ( 2 ) = 2.000 ALPHAT( 5 ) = -.160 X/LNM .200 .400  
 PHI  
 135.000 .2960  
 180.000 .3120 .1610  
 225.000 -.1320

MACH ( 2 ) = 2.000 ALPHAT( 6 ) = 1.690 X/LNM .200 .400  
 PHI  
 135.000 .2430  
 180.000 .2540 .1030  
 225.000 -.1420

(RBCU11)

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-757 1A9 O2A + S3 + T9 OMS NOZZLE

SECTION ( 1) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2) = 2.0000 ALPHA( 7) = 3.930	X/LNM	.200	.400
	PHI		
	135.000	.1680	
	180.000	.1770	.0670
MACH ( 2) = 2.0000 ALPHA( 8) = 5.980	225.000	-.1510	
	X/LNM	.200	.400
	PHI		
	135.000	.1450	
MACH ( 2) = 2.0000 ALPHA( 9) = 8.020	180.000	.1330	.0390
	225.000	-.1470	
	X/LNM	.200	.400
	PHI		
	135.000	.2030	
	180.000	.1470	.0170
	225.000	-.1460	

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + 53 + T9 0MS NOZZLE

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(RBOE02) ( 24 MAY 73 )

# REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.3300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) 0MS NOZZLE

### DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.140 X/LNM .200 .400  
 PHI 135.000 .1450  
 180.000 .3090 -.0499  
 225.000 -.2580

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.100 X/LNM .200 .400  
 PHI 135.000 .0910  
 180.000 .2770 -.0960  
 225.000 -.2680

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050 X/LNM .200 .400  
 PHI 135.000 .0620  
 180.000 .1590 -.1430  
 225.000 -.2630

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.110 X/LNM .200 .400  
 PHI 135.000 -.0770  
 180.000 -.0460 -.2130  
 225.000 -.2780

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.140 X/LNM .200 .400  
 PHI 135.000 -.1690  
 180.000 -.1230 -.2490  
 225.000 -.2790

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.190 X/LNM .200 .400  
 PHI 135.000 -.2480  
 180.000 -.2470 -.2680  
 225.000 -.2730

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.320 X/LNM .200 .400  
 PHI 135.000 -.1390  
 180.000 .1140 -.1020  
 225.000 -.1990

# PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUFLER = .000

(RBCE/2)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-757 1A9 ORA + S3 + T9 OMS NOZZLE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.270  
X/LNM .200 .400  
PHI  
135.000 -.0080  
180.000 .0930 -.0240  
225.000 -.0940

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210  
X/LNM .200 .400  
PHI  
135.000 .0570  
180.000 .2230 .1720  
225.000 -.0720

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.990  
X/LNM .200 .400  
PHI  
135.000 .0200  
180.000 .1460 -.0780  
225.000 -.1920

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 6.060  
X/LNM .200 .400  
PHI  
135.000 -.0230  
180.000 .0480 -.1430  
225.000 -.2140

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.120  
X/LNM .200 .400  
PHI  
135.000 .1340  
180.000 -.0580 -.1740  
225.000 -.2160



DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A9B

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AMES 97-707 1A9 C2A + S3 + T9 OMS NOZZLE

(RBOE03) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 6.0000 ORBINC = .5000  
 RUDDER = .0000 ELEVON = .0000  
 RUDDLR = .0000

## SECTION ( 1 ) OMS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.120  
 X/LNM .200 .400  
 PHI  
 135.000 .2560  
 180.000 .3700 .0960  
 225.000 -.2050

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070  
 X/LNM .200 .400  
 PHI  
 135.000 .2040  
 180.000 .3010 -.0290  
 225.000 -.2480

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.080  
 X/LNM .200 .400  
 PHI  
 135.000 .1450  
 180.000 .1650 -.1270  
 225.000 -.2640

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.080  
 X/LNM .200 .400  
 PHI  
 135.000 -.1640  
 180.000 .0260 -.2030  
 225.000 -.2710

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.110  
 X/LNM .200 .400  
 PHI  
 135.000 -.1910  
 180.000 -.0880 -.2430  
 225.000 -.2750

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.140  
 X/LNM .200 .400  
 PHI  
 135.000 -.2470  
 180.000 -.2530 -.2630  
 225.000 -.2690

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.300  
 X/LNM .200 .400  
 PHI  
 135.000 -.1600  
 180.000 .0110 -.0790  
 225.000 .0320

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 02A + S3 + T9 OHS NOZZLE

(RBOCT13)

## SECTION ( 1 ) OHS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	X/LNM	.200	.400
		PHI		
		135.000	.0910	
		180.000	.0640	.2450
		225.000	.0360	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.200	X/LNM	.200	.400
		PHI		
		135.000	.1410	
		180.000	.2970	.2690
		225.000	-.0520	
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.970	X/LNM	.200	.400
		PHI		
		135.000	.0070	
		180.000	.1710	-.0790
		225.000	-.1880	
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 6.030	X/LNM	.200	.400
		PHI		
		135.000	-.0110	
		180.000	.0550	-.1260
		225.000	-.2010	
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.080	X/LNM	.200	.400
		PHI		
		135.000	.0580	
		180.000	-.1150	-.1960
		225.000	-.2070	

(RBC14) ( 24 MAY 73 )

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B  
APES 92-707 1A9 O2A + S3 + T9 OWS NOZZLE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500  
RODDE = .000 ELEVON = .000  
RUFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XNRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YNRP = .0000 INCHES  
BREF = 39.8490 INCHES ZNRP = .0000 INCHES  
SCALE = .0300 SCALE

SECTION ( 1 ) OWS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.090  
X/LNM .200 .400  
PHI  
135.000 .3890  
180.000 .4130 .1840  
225.000 -.2020

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070  
X/LNM .200 .400  
PHI  
135.000 .2890  
180.000 .3190 -.0190  
225.000 -.2460

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.040  
X/LNM .200 .400  
PHI  
135.000 .1840  
180.000 .1870 -.1170  
225.000 -.2660

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.060  
X/LNM .200 .400  
PHI  
135.000 -.0680  
180.000 .0170 -.2080  
225.000 -.2720

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.080  
X/LNM .200 .400  
PHI  
135.000 -.1880  
180.000 -.0570 -.2370  
225.000 -.2720

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.100  
X/LNM .200 .400  
PHI  
135.000 -.2260  
180.000 -.2130 -.2630  
225.000 -.2670

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.270  
X/LNM .200 .400  
PHI  
135.000 .0840  
180.000 .0180 .0980  
225.000 .0960

(R80C1.4)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.240

X/LNM	PHI	CP
135.000	.1310	.400
180.000	.1980	.5100
225.000	.0430	

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200

X/LNM	PHI	CP
135.000	.2110	.400
180.000	.3110	.3910
225.000	-.0370	

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.950

X/LNM	PHI	CP
135.000	.0240	.400
180.000	.1970	-.0730
225.000	-.1840	

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.990

X/LNM	PHI	CP
135.000	-.0400	.400
180.000	.0740	-.1200
225.000	-.2140	

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.030

X/LNM	PHI	CP
135.000	-.1070	.400
180.000	-.0520	-.1770
225.000	-.2170	

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBC05) ( 24 MAY 73 )

AMES 97-717 1A9 08A + S3 + T9 0MS NOZZLE

PARAMETRIC DATA

REFERENCE DATA

ALPHAT = 2.1400 OFSINC = .500  
 RUDDER = .1400 ELEVON = .100  
 RUDDER = .1400

SREF = 2.4210 SQ.FT. XMRP = 20.5310 INCHES  
 LREF = 39.8490 INCHES YMRP = .1400 INCHES  
 BREF = 39.8490 INCHES ZMRP = .1400 INCHES  
 SCALE = .1314 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) 0MS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.100  
 X/LNM .200 .400  
 PHI  
 135.140 .4390  
 180.140 .4390 .2790  
 225.140 -.1720

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070  
 X/LNM .200 .400  
 PHI  
 135.140 .3800  
 180.140 .3710 .1460  
 225.140 -.2380

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050  
 X/LNM .200 .400  
 PHI  
 135.140 .2510  
 180.140 .2550 -.1640  
 225.140 -.2560

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.050  
 X/LNM .200 .400  
 PHI  
 135.140 -.1770  
 180.140 .1290 -.2180  
 225.140 -.2720

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.070  
 X/LNM .200 .400  
 PHI  
 135.140 -.1980  
 180.140 -.1430 -.2310  
 225.140 -.2650

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.090  
 X/LNM .200 .400  
 PHI  
 135.140 -.2420  
 180.140 -.1860 -.2620  
 225.140 -.2640

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.280  
 X/LNM .200 .400  
 PHI  
 135.140 .1160  
 180.140 .1370 .3760  
 225.140 .1870

(R50E15)

DATE 21 SEP 75      TABULATED PRESSURE DATA - 1A98  
 AMES 97-717 1A9 O2A + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250		X/LNM	.200
		PHI	.400
		135.000	.1970
		180.000	.2710
		225.000	.5650
			.0400
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.140		X/LNM	.200
		PHI	.400
		135.000	.2880
		180.000	.3370
		225.000	.4210
			-.0360
MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.940		X/LNM	.200
		PHI	.400
		135.000	.0280
		180.000	.2110
		225.000	-.0710
			-.1790
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.980		X/LNM	.200
		PHI	.400
		135.000	-.0630
		180.000	.0640
		225.000	-.1210
			-.2000
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.020		X/LNM	.200
		PHI	.400
		135.000	-.1280
		180.000	-.0420
		225.000	-.1690
			-.2030

DATE 21 SEP 73

CALCULATED PRESSURE DATA - 1A98

AVES 97-707 1A9 02A + S3 + T9 OWS NOZZLE

REVISION 22 MAY 73

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = 0.0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = 0.0000 INCHES  
 SCALE = 0.0000 SCALE

PARAMETRIC DATA

ALPHA = 0.0000 OFFING = 0.5000  
 RUDDER = 0.0000 ELEVON = 0.0000  
 RUDDER = 0.0000

DEPENDENT VARIABLE CP

SECTION ( 1 ) OWS NOZZLE		SECTION ( 2 ) OWS NOZZLE		SECTION ( 3 ) OWS NOZZLE		SECTION ( 4 ) OWS NOZZLE		SECTION ( 5 ) OWS NOZZLE		SECTION ( 6 ) OWS NOZZLE		SECTION ( 7 ) OWS NOZZLE	
MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.100	MACH ( 1 ) = 1.555	BETAT ( 1 ) = -5.000	MACH ( 1 ) = 1.555	BETAT ( 1 ) = -3.000	MACH ( 1 ) = 1.555	BETAT ( 1 ) = 5.000	MACH ( 1 ) = 1.555	BETAT ( 1 ) = 7.000	MACH ( 1 ) = 1.555	BETAT ( 1 ) = 9.000	MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.250
X/LNM	.200	X/LNM	.200	X/LNM	.200	X/LNM	.200	X/LNM	.200	X/LNM	.200	X/LNM	.200
PHI	.5400	PHI	.4710	PHI	.4130	PHI	.3870	PHI	.3350	PHI	.2790	PHI	.2480
135.000	.4620	135.000	.4130	135.000	.3870	135.000	.3350	135.000	.2790	135.000	.2480	135.000	.2180
180.000	-.1700	180.000	-.2200	180.000	-.2560	180.000	-.2700	180.000	-.2800	180.000	-.2850	180.000	-.2850
225.000	.3190	225.000	.1300	225.000	-.4000	225.000	-.4000	225.000	-.4000	225.000	-.4000	225.000	.4280

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 Q2A + S3 + 19 QWS NOZZLE

(SOURCE)

## SECTION ( 1 ) QWS NOZZLE      DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	X/LNM	.200	.400
		PHI		
		135.000	.2770	
		180.000	.3500	.6010
		225.000	.0310	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -.130	X/LNM	.210	.400
		PHI		
		135.000	.2780	
		180.000	.3240	.1900
		225.000	-.1430	
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.950	X/LNM	.210	.400
		PHI		
		135.000	-.1140	
		180.000	.2070	-.1690
		225.000	-.1720	
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.980	X/LNM	.210	.400
		PHI		
		135.000	-.1030	
		180.000	.0610	-.1160
		225.000	-.1960	



DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 AVES 97-71.7 1A9 OCA + S3 + T9 OMS NOZZLE

(RBOEL7) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -2.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.110	X/LNM	.200	.400
		PHI		
		135.000	.6220	
		180.000	.4950	.4210
		225.000	-.1480	
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -9.090	X/LNM	.200	.400
		PHI		
		135.000	.5740	
		180.000	.4670	.2210
		225.000	-.1940	
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.070	X/LNM	.200	.400
		PHI		
		135.000	.4310	
		180.000	.3910	-.0410
		225.000	-.2500	
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.040	X/LNM	.200	.400
		PHI		
		135.000	-.1990	
		180.000	.0420	-.2100
		225.000	-.2640	
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.060	X/LNM	.200	.400
		PHI		
		135.000	-.2180	
		180.000	-.0310	-.2210
		225.000	-.2550	
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.080	X/LNM	.200	.400
		PHI		
		135.000	-.2370	
		180.000	-.1590	-.2400
		225.000	-.2430	
MACH ( 2 ) = 2.040	BETAT ( 1 ) = -0.310	X/LNM	.200	.400
		PHI		
		135.000	.2950	
		180.000	.3140	.4760
		225.000	.0680	

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE (RBC117)

SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260 X/LNM .200 .400  
PHI  
135.000 .3320  
180.000 .4160  
225.000 .6200

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230 X/LNM .200 .400  
PHI  
135.000 .4380  
180.000 .3970  
225.000 .6320

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.940 X/LNM .200 .400  
PHI  
135.000 -.0390  
180.000 .2050  
225.000 -.0560

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.970 X/LNM .200 .400  
PHI  
135.000 -.1150  
180.000 .1000  
225.000 -.0990

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.000 X/LNM .200 .400  
PHI  
135.000 -.1230  
180.000 .1080  
225.000 -.1340

(RBOE18) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUFLR = .000

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.130  
 X/LNM .200 .400  
 PHI  
 135.000 .7090  
 180.000 .4980  
 225.000 -.0810

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.150  
 X/LNM .200 .400  
 PHI  
 135.000 .6800  
 180.000 .5270  
 225.000 -.1340

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.070  
 X/LNM .200 .400  
 PHI  
 135.000 .4810  
 180.000 .4380  
 225.000 -.2370

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.030  
 X/LNM .200 .400  
 PHI  
 135.000 -.1520  
 180.000 .0200  
 225.000 -.2540

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.050  
 X/LNM .200 .400  
 PHI  
 135.000 -.2080  
 180.000 -.0280  
 225.000 -.2440

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.070  
 X/LNM .200 .400  
 PHI  
 135.000 -.2300  
 180.000 -.1640  
 225.000 -.2390

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.310  
 X/LNM .200 .400  
 PHI  
 135.000 .3570  
 180.000 .4090  
 225.000 .5550

(RBOEUS)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000    BETAT ( 2 ) = -6.270	X/LNM	.200	.400
	PHI		
	135.000	.4220	
	180.000	.4650	.6680
	225.000	.0330	
MACH ( 2 ) = 2.000    BETAT ( 3 ) = -4.230	X/LNM	.200	.400
	PHI		
	135.000	.5120	
	180.000	.4140	.6980
	225.000	.0410	
MACH ( 2 ) = 2.000    BETAT ( 4 ) = 3.920	X/LNM	.200	.400
	PHI		
	135.000	-.1020	
	180.000	.2440	-.0140
	225.000	-.1590	
MACH ( 2 ) = 2.000    BETAT ( 5 ) = 5.980	X/LNM	.200	.400
	PHI		
	135.000	-.1110	
	180.000	.1410	-.0740
	225.000	-.1030	
MACH ( 2 ) = 2.000    BETAT ( 6 ) = 8.010	X/LNM	.200	.400
	PHI		
	135.000	-.1110	
	180.000	.0470	-.1090
	225.000	-.1960	

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-717 1A9 O2A + S3 + T9 OWS NOZZLE

REFERENCE DATA  
 SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = 10.000 INCHES  
 BREF = 39.8490 INCHES ZMRP = 10.000 INCHES  
 SCALE = .0310 SCALE

PARAMETRIC DATA

ALPHA = -5.000  
 RADIUS = 1.000  
 ELEVON = 1.000  
 DEFINC = .500

DEPENDENT VARIABLE CP

SECTION ( 1 ) OWS NOZZLE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -0.160	X/LNM	.200	.400
		PHI		
		135.000	.7770	
		180.000	.5090	.7450
		225.000	-.0380	
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.170	X/LNM	.200	.400
		PHI		
		135.000	.7710	
		180.000	.5490	.5750
		225.000	-.1050	
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.180	X/LNM	.200	.400
		PHI		
		135.000	.6560	
		180.000	.5270	.2180
		225.000	-.1920	
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 3.640	X/LNM	.200	.400
		PHI		
		135.000	-.1920	
		180.000	-.0390	-.2220
		225.000	-.2420	
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 5.690	X/LNM	.200	.400
		PHI		
		135.000	-.1740	
		180.000	.0280	-.1990
		225.000	-.2460	
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 7.740	X/LNM	.200	.400
		PHI		
		135.000	-.2220	
		180.000	-.0920	-.2180
		225.000	-.2320	
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -0.340	X/LNM	.200	.400
		PHI		
		135.000	.4100	
		180.000	.5270	.6510
		225.000	.0640	

(RBC149)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B  
AMES 97-737 1A9 OEA + S3 + T9 QMS NOZZLE

SECTION ( 1 ) QMS NOZZLE DEPENDENT VARIABLE C<sub>q</sub>

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.300  
X/LNM .200 .400  
PHI  
135.000 .5390  
180.000 .4760  
225.000 .0390

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.250  
X/LNM .200 .400  
PHI  
135.000 .5670  
180.000 .4280  
225.000 .0590

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.930  
X/LNM .200 .400  
PHI  
135.000 .0090  
180.000 .0310  
225.000 -.1440

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 8.020  
X/LNM .200 .400  
PHI  
135.000 -.0890  
180.000 .1160  
225.000 -.1800

(RBOE10) ( 24 MAY 73 )

DATE 21 SEP '73 TABULATED PRESSURE DATA - 1A9B  
AVES 97-707 1A9 OBA + S3 + T9 OMS NOZZLE

PARAMETRIC DATA  
ALPHAT = -8.000 ORBINC = .500  
RUDDER = .000 ELEVON = .000  
RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE		X/LNM	
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.200		PHI	
		135.000	.8070
		180.000	.5070
		225.000	-.0320
			.400
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.210		X/LNM	
		PHI	
		135.000	.7920
		180.000	.5530
		225.000	-.0720
			.400
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220		X/LNM	
		PHI	
		135.000	.7000
		180.000	.5680
		225.000	-.1720
			.400
MACH ( 1 ) = 1.555 BETAT ( 4 ) = 3.650		X/LNM	
		PHI	
		135.000	-.1910
		180.000	-.0150
		225.000	-.2380
			.400
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 5.710		X/LNM	
		PHI	
		135.000	-.1710
		180.000	.0420
		225.000	-.2390
			.400
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 7.770		X/LNM	
		PHI	
		135.000	-.2180
		180.000	-.1850
		225.000	-.2250
			.400
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.390		X/LNM	
		PHI	
		135.000	.4440
		180.000	.5870
		225.000	.0580
			.400

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 ORA + S3 + T9 OMS NOZZLE

(RBOE11)

SECTION ( 1 ) OMS NOZZLE  
DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.330	X/LNM PHI	.200	.400
		135.000	.5970	
		180.000	.4770	.7950
		225.000	.0440	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.280	X/LNM PHI	.200	.400
		135.000	.5790	
		180.000	.4330	.8130
		225.000	.0660	
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -1.170	X/LNM PHI	.200	.400
		135.000	.3640	
		180.000	.4450	.3480
		225.000	-.0720	
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.940	X/LNM PHI	.200	.400
		135.000	.0030	
		180.000	.3090	.0380
		225.000	-.1390	
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	X/LNM PHI	.200	.400
		135.000	-.0710	
		180.000	.2430	-.0040
		225.000	-.1560	
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.050	X/LNM PHI	.200	.400
		135.000	-.0740	
		180.000	.1350	-.0430
		225.000	-.1730	



DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 OEA + S3 + T9 OMS NOZZLE

(RBOE11) ( 24 MAY 73 )

## REFERENCE DATA

SRPF = 2.4210 SQ.FT. XMRP = 28.5350 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .900  
 RUDDER = -15.000 ELEVON = .000  
 RUOFLR = .000

## SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.420  
 X/LNM .200 .400  
 PHI  
 135.000 .7980  
 180.000 .4890  
 225.000 -.0440

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.360  
 X/LNM .200 .400  
 PHI  
 135.000 .7840  
 180.000 .5350  
 225.000 -.0660

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.310  
 X/LNM .200 .400  
 PHI  
 135.000 .7240  
 180.000 .5610  
 225.000 -.1640

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.180  
 X/LNM .200 .400  
 PHI  
 135.000 .1990  
 180.000 .4100  
 225.000 -.0380

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940  
 X/LNM .200 .400  
 PHI  
 135.000 -.2040  
 180.000 -.0250  
 225.000 -.2450

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000  
 X/LNM .200 .400  
 PHI  
 135.000 -.1880  
 180.000 .0350  
 225.000 -.1990

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.060  
 X/LNM .200 .400  
 PHI  
 135.000 -.2300  
 180.000 -.1920  
 225.000 -.2370

(RBOE:1)

DATE 81 SEP 73 TABULATED PRESSURE DATA - 1A9B  
AMES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE	DEPENDENT VARIABLE CP
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.390	X/LNM .200 .400 PHI 135.000 180.000 .5890 225.000 .0310
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.340	X/LNM .200 .400 PHI 135.000 .6220 180.000 .4790 225.000 .0470
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.290	X/LNM .200 .400 PHI 135.000 .5830 180.000 .4280 225.000 .0560
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -1.180	X/LNM .200 .400 PHI 135.000 .3840 180.000 .4480 225.000 -.0630
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930	X/LNM .200 .400 PHI 135.000 .0140 180.000 .3250 225.000 -.1330
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980	X/LNM .200 .400 PHI 135.000 -.1650 180.000 .2540 225.000 -.1540
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040	X/LNM .200 .400 PHI 135.000 -.1690 180.000 .1470 225.000 -.1740

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98

(RBOE12) ( 24 MAY 73 )  
 AMES 97-707 1A9 OSA + S3 + T9 OMS NOZZLE

PARAMETRIC DATA

ALPHAT = -4.1440 ORBINC = .5000  
 RUDDER = -15.0000 ELEVON = .0000  
 RUDDLR = .1440

REFERENCE DATA

SREF = 2.4210 SQ.FT. MMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0310 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -0.350	X/LNM	PHI
		.200	.400
		.135.000	.6740
		.180.000	.4730
		.225.000	-.0700
			.7530
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.310	X/LNM	PHI
		.200	.400
		.135.000	.6920
		.180.000	.5200
		.225.000	-.1210
			.5180
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.260	X/LNM	PHI
		.200	.400
		.135.000	.6340
		.180.000	.5030
		.225.000	-.1990
			.2060
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.170	X/LNM	PHI
		.200	.400
		.135.000	.1320
		.180.000	.2750
		.225.000	-.2730
			-.1030
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.630	X/LNM	PHI
		.200	.400
		.135.000	-.1530
		.180.000	-.1660
		.225.000	-.2450
			-.2400
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	X/LNM	PHI
		.200	.400
		.135.000	-.1720
		.180.000	.0230
		.225.000	-.2610
			-.2060
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 0.020	X/LNM	PHI
		.200	.400
		.135.000	-.2330
		.180.000	-.1120
		.225.000	-.2460
			-.2340

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

PAGE 492

AMES 97-707 1A9 ORA + S3 + 79 OMS NOZZLE

(RBOE12)

## SECTION ( 1 ) OMS NOZZLE

## DEPENDENT VARIABLE CF

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.320 X/LNM .200 .400  
PHI  
135.000 .3420  
180.000 .4080 .5590  
225.000 .0520

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.280 X/LNM .200 .400  
PHI  
135.000 .4020  
180.000 .4490 .6340  
225.000 .0230

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.240 X/LNM .200 .400  
PHI  
135.000 .4990  
180.000 .4020 .7020  
225.000 .0410

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170 X/LNM .200 .400  
PHI  
135.000 .3450  
180.000 .3910 .2560  
225.000 -.1070

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.920 X/LNM .200 .400  
PHI  
135.000 -.0270  
180.000 .2410 -.0290  
225.000 -.1620

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.960 X/LNM .200 .400  
PHI  
135.000 -.1110  
180.000 .1490 -.0720  
225.000 -.1810

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.010 X/LNM .200 .400  
PHI  
135.000 -.0960  
180.000 .0560 -.1140  
225.000 -.1940

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

PAGE 493

AMES 97-717 1A9 O2A + S3 + T9 OWS NOZZLE

(RSC013) (24 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = .000 ONBINC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUDELR = .000

SECTION ( 1 ) OWS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.310  
 X/LNM .200 .400  
 PHI  
 135.000 .5070  
 180.000 .4390  
 225.000 -.5240

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.280  
 X/LNM .200 .400  
 PHI  
 135.000 .5230  
 180.000 .4590  
 225.000 -.3140

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240  
 X/LNM .200 .400  
 PHI  
 135.000 .4680  
 180.000 .3810  
 225.000 -.0650

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.140  
 X/LNM .200 .400  
 PHI  
 135.000 .0890  
 180.000 .1740  
 225.000 -.1400

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940  
 X/LNM .200 .400  
 PHI  
 135.000 -.0200  
 180.000 .1600  
 225.000 -.1930

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990  
 X/LNM .200 .400  
 PHI  
 135.000 -.1390  
 180.000 .1340  
 225.000 -.2150

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.030  
 X/LNM .200 .400  
 PHI  
 135.000 -.2340  
 180.000 -.0780  
 225.000 -.2460

DATE 21 SEP 73

STABULATED PRESSURE DATA - 1A9B

AMES 97-7U7 1A9 CEA + S3 + T9 CMS NOZZLE

1301

## DEPENDENT VARIABLE CP

SECTION (1) NOZZLE

$$a_1 = 2 \text{ mm} \quad \text{BETAT} (1) = -0.300$$

X/LNM	.200	.400
P41		
135.000	.2090	
180.000	.2000	.4460
225.000	.0760	

$$\text{BETAT} (2) = 2.000 \quad \text{BETAT} (2) = -6.260$$

X/LNM	.200	.400
FMI		
135.120	.250	.530
180.120	.320	
225.120	.020	

$$\text{MACRO} (2) = 2.000 \text{ BETAT} (3) = -4.220$$

X/LNM	.211	.400
FM		
35.000	.3490	.5230
180.000	.3470	
225.000	-.10460	

$$\text{BETAT} (4) = -140$$

44/LNW	.200	.400
PHI		
35.120	.2870	
80.1000	.3110	.1570
25.100	-.1370	

MAOCH (2) = 2.000 BETAT (5) = 3.930

25.480	- .1730
80.000	.1890
55.000	- .1230
44.000	.2000
25.480	.4000

$$\text{BETAT ( 6 )} = 5.980$$

1/104	.240	.400
417	-.1060	
5.020	.0550	-.1160
20.020		
25.020	-.1920	

027.9 = 2.000 DETAT ( 7 ) = 8.120

7.144	.200	.400
HI		
5.142	-.1290	
4.140	-.1490	-.1590
3.138	-.1940	

(RBOE14) (24 MAY 73) ;

### PARAMETRIC DATA

ALPHAT =	4.000	ORBINC =	.500
RUDDER =	-15.000	ELEVON =	.000
RUDEFL =	.000		

SREF =	2.4210 SQ. FT.	XMRP =	20.9300 INCHES
LREF =	39.8490 INCHES	YMRP =	1.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	1.0000 INCHES
SCALE =	.0300 SCALE		

## REFERENCE DATA

SECTION 4.1105 NOZZLE E  
DEPENDENT VARIABLE CP

WACH ( 1 ) =	1.555	BETAT ( 1 ) =	-8.300		.212	.400
				FBI		
				135.1400	.3170	
				180.1400	.3870	.3580
				225.1400	-.1190	

MACRO	( 1 ) = 1.555	BETAT ( 2 ) = -6.260	X/LNM	.2125	.4125
			FMT		
			135.1425	.2940	
			180.1425	.3680	.1890
			225.1425	-.2170	

COACH	( 3 ) = 1.555	BETAT ( 3 ) = -4.220	X/LNM FBI	.270	.012
			135.140	.2940	
			180.140	.2780	-.0570
			225.140	-.2670	

PARAMETER	ESTIMATE	STANDARD ERROR	TEST	PROBABILITY
INTERCEPT	1.555	.012	135.142	.0000
AGE	-.123	.003	-35.142	.0000
SEX	.045	.005	9.000	.0000
EDUCATION	.027	.002	13.500	.0000
INCOME	.001	.000	1.500	.0000
UNEMPLOYED	-.198	.005	-39.600	.0000
RETIRED	.067	.002	33.500	.0000
WOMAN	.012	.001	12.000	.0000
BLACK	.001	.000	1.500	.0000
WHITE	.001	.000	1.500	.0000
ASIAN	.001	.000	1.500	.0000
HISPANIC	.001	.000	1.500	.0000
OTHER	.001	.000	1.500	.0000

ANCHOR (1) = 1.955	BETA* (5) = 3.950	X/LNM	.212	.402
		PMT		
		135.1400	-.16220	
		180.1400	-.14790	-.21680
		225.1400	-.27080	

Wavelength (Å) = 1.555	DETAY (°) = 6.140		
		h/k/l/m	2θ(h)
		PMI	
		135.140	-1240
		180.140	-1060
		205.140	-2400
			-2160

COUCH ( 1 ) = 1.995	BETAT ( 7 ) = 6.0400	X/LNM FMI	-ZLJ	-ALJ
		135.142	-.2271	
		100.142	-.1900	-.2570
		225.142	-.2762	

DATE 21 SEP 79 TABULATED PRESSURE DATA - 1A98  
 ANES 97-707 1A9 ORA + S3 + T9 OMS NOZZLE (RBOE14)

SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CF

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.295  
 X/LNM .200 .400  
 PHI  
 135.000 .0270  
 180.000 .0010 .0390  
 225.000 .0950

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250  
 X/LNM .200 .400  
 PHI  
 135.000 .1260  
 180.000 .1760 .4970  
 225.000 .0420

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200  
 X/LNM .200 .400  
 PHI  
 135.000 .2130  
 180.000 .2980 .3070  
 225.000 -.0400

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.130  
 X/LNM .200 .400  
 PHI  
 135.000 .1810  
 180.000 .1790 .0750  
 225.000 -.1550

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990  
 X/LNM .200 .400  
 PHI  
 135.000 .0050  
 180.000 .1950 -.0780  
 225.000 -.1880

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.990  
 X/LNM .200 .400  
 PHI  
 135.000 -.0390  
 180.000 .0440 -.1270  
 225.000 -.1980

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040  
 X/LNM .200 .400  
 PHI  
 135.000 -.1830  
 180.000 -.0880 -.1890  
 225.000 -.2140



DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AVES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

(EBOE15) ( 22 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.6490 INCHES YMRP = .0400 INCHES  
 BREF = 39.6490 INCHES ZMRP = .0400 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUDFLR = .000

## SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.320	X/LNM	PHI	CP
		135.000	.2140	
		180.000	.3460	.2380
		225.000	-.1570	
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.280	X/LNM	PHI	CP
		135.000	.2780	
		180.000	.3750	.0850
		225.000	-.2180	
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.230	X/LNM	PHI	CP
		135.000	.1750	
		180.000	.2710	-.0400
		225.000	-.2640	
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.120	X/LNM	PHI	CP
		135.000	-.0430	
		180.000	-.0160	-.1950
		225.000	-.2680	
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.970	X/LNM	PHI	CP
		135.000	-.0050	
		180.000	.0640	-.1880
		225.000	-.2760	
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.030	X/LNM	PHI	CP
		135.000	-.1260	
		180.000	-.0140	-.2200
		225.000	-.2790	
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 6.080	X/LNM	PHI	CP
		135.000	-.2360	
		180.000	-.1660	-.2680
		225.000	-.2750	

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

(RBOE15)

AKES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.260  
 X/LNM .200 .400  
 PHI  
 135.000 .0430  
 180.000 .0480  
 225.000 .0390

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -4.210  
 X/LNM .200 .400  
 PHI  
 135.000 .1410  
 180.000 .2780  
 225.000 -.0360

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -.130  
 X/LNM .200 .400  
 PHI  
 135.000 .1380  
 180.000 .1290  
 225.000 -.1480

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.970  
 X/LNM .200 .400  
 PHI  
 135.000 .0010  
 180.000 .1540  
 225.000 -.1860

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 6.020  
 X/LNM .200 .400  
 PHI  
 135.000 -.0250  
 180.000 .0530  
 225.000 -.1980

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.070  
 X/LNM .200 .400  
 PHI  
 135.000 .0730  
 180.000 -.1170  
 225.000 -.2120

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B

AMES 97-757 1A9 Q2A + S3 + T9 QMS NOZZLE (RBOE16) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 0.000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUDEFL = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) QMS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -0.350 X/LNM .200 .400  
 PHI  
 135.000 .1440  
 180.000 .2970 .0170  
 225.000 -.2260

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -0.290 X/LNM .200 .400  
 PHI  
 135.000 .1640  
 180.000 .3060 -.0610  
 225.000 -.2630

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -0.240 X/LNM .200 .400  
 PHI  
 135.000 .1140  
 180.000 .2620 -.0710  
 225.000 -.2630

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110 X/LNM .200 .400  
 PHI  
 135.000 -.0560  
 180.000 -.0320 -.2140  
 225.000 -.2630

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 4.000 X/LNM .200 .400  
 PHI  
 135.000 -.0180  
 180.000 .0320 -.1920  
 225.000 -.2810

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.060 X/LNM .200 .400  
 PHI  
 135.000 -.1270  
 180.000 -.1430 -.2260  
 225.000 -.2830

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.120 X/LNM .200 .400  
 PHI  
 135.000 -.2000  
 180.000 -.1560 -.2670  
 225.000 -.2830

(RBOE16)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A98  
 ANES 97-707 1A9 O2A + S3 + 19 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE	DEPENDENT VARIABLE CP			
MACH ( 2 ) = 2.000    BETAT ( 1 ) = -8.340	X/LNM	.200	.400	
	PHI			
	135.000	.0000		
	180.000	.0000	.0000	
	225.000	.0000		
MACH ( 2 ) = 2.000    BETAT ( 2 ) = -6.270	X/LNM	.200	.400	
	PHI			
	135.000	-.0320		
	180.000	.0900	-.0250	
	225.000	-.1010		
MACH ( 2 ) = 2.000    BETAT ( 3 ) = -4.220	X/LNM	.200	.400	
	PHI			
	135.000	.0690		
	180.000	.2090	.1980	
	225.000	-.0610		
MACH ( 2 ) = 2.000    BETAT ( 4 ) = -.120	X/LNM	.200	.400	
	PHI			
	135.000	.1970		
	180.000	.1410	.0360	
	225.000	-.1580		
MACH ( 2 ) = 2.000    BETAT ( 5 ) = 3.990	X/LNM	.200	.400	
	PHI			
	135.000	.0220		
	180.000	.1430	-.0760	
	225.000	-.1920		
MACH ( 2 ) = 2.000    BETAT ( 6 ) = 6.090	X/LNM	.200	.400	
	PHI			
	135.000	-.0180		
	180.000	.0210	-.1510	
	225.000	-.1960		
MACH ( 2 ) = 2.000    BETAT ( 7 ) = 8.110	X/LNM	.200	.400	
	PHI			
	135.000	.1180		
	180.000	-.0410	-.1590	
	225.000	-.2100		

DATE 21 SEP 73

ISOLATED PRESSURE DATA - 1A98

AMES 97-757 1A9 O2A + S3 + T9 OMS NOZZLE

(RBOE17) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

SECTION ( 1 ) OMS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.410

DEPENDENT VARIABLE CP

X/LNM .200 .400  
 PHI  
 135.000 .0290  
 180.000 .5180  
 225.000 -.0310

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.360

X/LNM .200 .400  
 PHI  
 135.000 .0120  
 180.000 .5660  
 225.000 -.0800

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.300

X/LNM .200 .400  
 PHI  
 135.000 .7240  
 180.000 .5670  
 225.000 -.1670

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.180

X/LNM .200 .400  
 PHI  
 135.000 .1790  
 180.000 .3780  
 225.000 -.2470

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.930

X/LNM .200 .400  
 PHI  
 135.000 -.1920  
 180.000 -.0180  
 225.000 -.2330

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990

X/LNM .200 .400  
 PHI  
 135.000 -.1080  
 180.000 .0070  
 225.000 -.2290

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.050

X/LNM .200 .400  
 PHI  
 135.000 -.2180  
 180.000 -.1080  
 225.000 -.2190

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .500  
 RUDDER = -10.000 ELEWON = .000  
 RUOFLR = .000

(RBOE17)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 CBA + S3 + T9 OMS NOZZLE

SECTION ( 3 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.380  
X/LNM .200 .400  
PHI  
135.000 .4880  
180.000 .5830  
225.000 .7300

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330  
X/LNM .200 .400  
PHI  
135.000 .6330  
180.000 .7360  
225.000 .8440

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280  
X/LNM .200 .400  
PHI  
135.000 .8020  
180.000 .8350  
225.000 .8730

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -2.170  
X/LNM .200 .400  
PHI  
135.000 .9560  
180.000 .9920  
225.000 -1.0560

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 0.930  
X/LNM .200 .400  
PHI  
135.000 .0220  
180.000 .0590  
225.000 -.1360

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980  
X/LNM .200 .400  
PHI  
135.000 -.1670  
180.000 -.2480  
225.000 -.1540

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.140  
X/LNM .200 .400  
PHI  
135.000 -.1760  
180.000 -.1940  
225.000 -.1720

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A99

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AXES 97-707 1A9 Q2A + S3 + T9 OMS NOZZLE

(RBOE18) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 28.3300 INCHES  
 LREF = 35.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) OMS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.340  
 X/LNM .200 .400  
 PHI  
 135.000 .6820  
 180.000 .4980  
 225.000 -.0770

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.300  
 X/LNM .200 .400  
 PHI  
 135.000 .6840  
 180.000 .5320  
 225.000 -.1300

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.250  
 X/LNM .200 .400  
 PHI  
 135.000 .6090  
 180.000 .4940  
 225.000 -.2070

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.160  
 X/LNM .200 .400  
 PHI  
 135.000 .1000  
 180.000 .2480  
 225.000 -.2620

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.930  
 X/LNM .200 .400  
 PHI  
 135.000 -.1770  
 180.000 -.0890  
 225.000 -.2380

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.980  
 X/LNM .200 .400  
 PHI  
 135.000 -.1750  
 180.000 .0150  
 225.000 -.2560

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.020  
 X/LNM .200 .400  
 PHI  
 135.000 -.2290  
 180.000 -.1100  
 225.000 -.2330

## PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500  
 RUDDER = -10.000 ELEVON = .100  
 RUFLR = .000

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
ANES 97-757 1A9 O2A + S3 + T9 OMS NOZZLE

(RBOE18)

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.320	X/LNH .200	.400
		PHI	
		135.000	.3780
		180.000	.4050
		225.000	.5460
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	X/LNH .200	.400
		PHI	
		135.000	.4260
		180.000	.4670
		225.000	.6710
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.230	X/LNH .200	.400
		PHI	
		135.000	.5180
		180.000	.4170
		225.000	.7080
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.160	X/LNH .200	.400
		PHI	
		135.000	.3710
		180.000	.3980
		225.000	.2960
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.920	X/LNH .200	.400
		PHI	
		135.000	-.0310
		180.000	.2410
		225.000	-.0210
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.960	X/LNH .200	.400
		PHI	
		135.000	-.1110
		180.000	.1440
		225.000	-.0740
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.010	X/LNH .200	.400
		PHI	
		135.000	-.1080
		180.000	.0440
		225.000	-.1120
			-.1890



DATE 21 SEP 73 TUBULATED PRESSURE DATA - 1A98  
AVES 97-707 1A9 Q2A + S3 + T9 OMS NOZZLE

(RBOE19) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = .0000 ORBINC = .0000  
RUDDER = -10.000 ELEVON = .0000  
RUOFLR = .0000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.320  
X/LNM .200 .400  
PHI  
135.000 .4930  
180.000 .4860  
225.000 -.1120

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270  
X/LNM .200 .400  
PHI  
135.000 .4870  
180.000 .4680  
225.000 -.1850

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240  
X/LNM .200 .400  
PHI  
135.000 .4570  
180.000 .3770  
225.000 -.2280

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.140  
X/LNM .200 .400  
PHI  
135.000 .0900  
180.000 .1360  
225.000 -.2640

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990  
X/LNM .200 .400  
PHI  
135.000 -.0900  
180.000 .0550  
225.000 -.2580

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990  
X/LNM .200 .400  
PHI  
135.000 -.1560  
180.000 -.0030  
225.000 -.2090

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.040  
X/LNM .200 .400  
PHI  
135.000 -.2340  
180.000 -.1960  
225.000 -.2520

(RBOE19)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A98  
 AHES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.300	X/LNM	.200
		PHI	.400
		135.000	.2010
		180.000	.1960
		225.000	.4570
			.0780
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.260	X/LNM	.200
		PHI	.400
		135.000	.2510
		180.000	.3280
		225.000	.5800
			.0330
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.220	X/LNM	.200
		PHI	.400
		135.000	.3480
		180.000	.3510
		225.000	.5040
			-.0070
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -1.140	X/LNM	.200
		PHI	.400
		135.000	.2740
		180.000	.3080
		225.000	.1490
			-.1460
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	X/LNM	.200
		PHI	.400
		135.000	-.0290
		180.000	.1800
		225.000	-.1780
			-.0880
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	X/LNM	.200
		PHI	.400
		135.000	-.1040
		180.000	.0500
		225.000	-.1210
			-.1920
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.120	X/LNM	.200
		PHI	.400
		135.000	-.1320
		180.000	-.0500
		225.000	-.1620
			-.1940



(R50E25) ( 24 MAY 72 )

DATE 21 SEP 73  
TABULATED PRESSURE DATA - 1A98  
AVES 97-707 1A9 Q2A + S3 + T9 QMS NOZZLE

PARAMETRIC DATA  
ALPHAT = 4.000 ORBLINC = .000  
RUZDER = -10.000 ELEVON = .000  
RUOFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) QMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555	BETAT ( 1 ) = -0.300	X/LNM	.200
		PHI	.400
		135.000	.2070
		180.000	.3900
		225.000	-.1200
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.270	X/LNM	.200
		PHI	.400
		135.000	.3290
		180.000	.3680
		225.000	-.2190
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.220	X/LNM	.200
		PHI	.400
		135.000	.2780
		180.000	.2720
		225.000	-.0630
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.130	X/LNM	.200
		PHI	.400
		135.000	-.0210
		180.000	.0260
		225.000	-.2560
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.960	X/LNM	.200
		PHI	.400
		135.000	-.0320
		180.000	.0210
		225.000	-.2070
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.000	X/LNM	.200
		PHI	.400
		135.000	-.1360
		180.000	-.0120
		225.000	-.2150
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 0.100	X/LNM	.200
		PHI	.400
		135.000	-.2280
		180.000	-.1030
		225.000	-.2950

(RSC21)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 OZA + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000    BETAT ( 1 ) = -8.28L	X/LNM	.200	.400
	PHI		
	135.000	.0030	
	180.000	.0030	.0430
	225.000	.0930	
MACH ( 2 ) = 2.000    BETAT ( 2 ) = -6.24U	X/LNM	.200	.400
	PHI		
	135.000	.1140	
	180.000	.1890	.4860
	225.000	.0400	
MACH ( 2 ) = 2.000    BETAT ( 3 ) = -4.20U	X/LNM	.200	.400
	PHI		
	135.000	.2100	
	180.000	.3020	.3660
	225.000	-.0440	
MACH ( 2 ) = 2.000    BETAT ( 4 ) = -.130	X/LNM	.200	.400
	PHI		
	135.000	.1700	
	180.000	.1790	.0730
	225.000	-.1600	
MACH ( 2 ) = 2.000    BETAT ( 5 ) = 3.99U	X/LNM	.200	.400
	PHI		
	135.000	.0020	
	180.000	.1870	-.0840
	225.000	-.1880	
MACH ( 2 ) = 2.000    BETAT ( 6 ) = 5.99U	X/LNM	.200	.400
	PHI		
	135.000	-.0370	
	180.000	.0340	-.1280
	225.000	-.1980	
MACH ( 2 ) = 2.000    BETAT ( 7 ) = 8.04U	X/LNM	.200	.400
	PHI		
	135.000	-.0790	
	180.000	-.0840	-.1860
	225.000	-.2020	

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A9B

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AMES 97-7.7 1A9 O2A + S3 + T9 OMS NOZZLE

(RBCE21) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 6.0000 ORBINC = .0000  
 RUDDER = -10.0000 ELEVON = .0000  
 RUDFLR = .0000

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) OMS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -0.330  
 X/LNM .200 .400  
 PHI  
 135.000 .1990  
 180.000 .3460  
 225.000 -.1600

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.290  
 X/LNM .200 .400  
 PHI  
 135.000 .2440  
 180.000 .3680  
 225.000 -.0450

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230  
 X/LNM .200 .400  
 PHI  
 135.000 .1700  
 180.000 .2790  
 225.000 -.0360

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120  
 X/LNM .200 .400  
 PHI  
 135.000 -.0700  
 180.000 -.1980  
 225.000 -.2580

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.980  
 X/LNM .200 .400  
 PHI  
 135.000 -.0250  
 180.000 .0470  
 225.000 -.1990

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.140  
 X/LNM .200 .400  
 PHI  
 135.000 -.1260  
 180.000 -.0200  
 225.000 -.2730

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 0.110  
 X/LNM .200 .400  
 PHI  
 135.000 -.2350  
 180.000 -.1730  
 225.000 -.2640

AMES 97-707 1A9 OSA + S3 + T9 OMS NOZZLE

(RBOE21)

## SECTION ( 1 ) OMS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.310 X/LNM .200 .400  
 PHI  
 135.000 -.0970  
 180.000 .0010 -.0830  
 225.000 .0070

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260 X/LNM .200 .400  
 PHI  
 135.000 .0000  
 180.000 .0670 .2180  
 225.000 .0120

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210 X/LNM .200 .400  
 PHI  
 135.000 .1400  
 180.000 .2790 .2710  
 225.000 -.0600

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.120 X/LNM .200 .400  
 PHI  
 135.000 .1330  
 180.000 .1360 .0400  
 225.000 -.1600

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.970 X/LNM .200 .400  
 PHI  
 135.000 .0080  
 180.000 .1670 -.0810  
 225.000 -.1890

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.020 X/LNM .200 .400  
 PHI  
 135.000 .0050  
 180.000 .0350 -.1310  
 225.000 -.1990

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.070 X/LNM .200 .400  
 PHI  
 135.000 .1040  
 180.000 -.1270 -.1960  
 225.000 -.2060

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A9B  
 CASES 97-707 1A9 CEA + S3 + T9 OMS NOZZLE

(R50E22) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = 8.4440 ORBINC = .0400  
 RUDDER = -10.0000 ELEVON = .0000  
 RUDDLR = .0000

REFERENCE DATA

SREF = 2.4210 SQ.FT. ANRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 SREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.360  
 X/LNM .200 .400  
 PHI  
 135.000 .1300  
 180.000 .2980 .0000  
 225.000 -.2240

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.310  
 X/LNM .200 .400  
 PHI  
 135.000 .1900  
 180.000 .2940 -.0770  
 225.000 -.2640

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230  
 X/LNM .200 .400  
 PHI  
 135.000 .0980  
 180.000 .2570 -.0810  
 225.000 -.2630

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -3.110  
 X/LNM .200 .400  
 PHI  
 135.000 -.0680  
 180.000 -.0520 -.2150  
 225.000 -.2560

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940  
 X/LNM .200 .400  
 PHI  
 135.000 -.0310  
 180.000 .0250 -.1980  
 225.000 -.2760

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.060  
 X/LNM .200 .400  
 PHI  
 135.000 -.1350  
 180.000 -.0680 -.2300  
 225.000 -.2760

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.120  
 X/LNM .200 .400  
 PHI  
 135.000 -.2080  
 180.000 -.1650 -.2640  
 225.000 -.27

DATE 21 SEP 73

INSULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 Q2A + S3 + T9 OMS NOZZLE

(RBOE22)

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.330	X/LNM	.200
		PHI	.400
		135.000	-.1560
		180.000	-.0220
		225.000	-.1070
			-.1150
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.280	X/LNM	.200
		PHI	.400
		135.000	-.0180
		180.000	.0790
		225.000	-.0240
			-.1030
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.220	X/LNM	.200
		PHI	.400
		135.000	.0680
		180.000	.2220
		225.000	.1920
			-.0630
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.310	X/LNM	.200
		PHI	.400
		135.000	.1620
		180.000	.1270
		225.000	.0530
			-.1580
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 4.000	X/LNM	.200
		PHI	.400
		135.000	.0260
		180.000	.1450
		225.000	-.0770
			-.1910
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.050	X/LNM	.200
		PHI	.400
		135.000	-.0280
		180.000	.0280
		225.000	-.1490
			-.1990
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.110	X/LNM	.200
		PHI	.400
		135.000	.1220
		180.000	-.0410
		225.000	-.1620
			-.2130



(RBOE23) ( 24 MAY 73 )

DATE 21 SEP 73  
TABULATED PRESSURE DATA - 1498  
AMES 97-707 1A9 ORA + S3 + T9 OWS NOZZLE

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .000  
RUDDER = 15.000 ELEVON = .000  
RUOFLR = .000

REFERENCE DATA

SETP = 2.4210 SQ.FT. MRIP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0374 SCALE

SECTION ( 1 ) OWS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.400	X/LNM	PHI
		.200	.400
		.35.000	.8000
		.60.000	.8840
		.225.000	-.0400
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.360	X/LNM	PHI
		.200	.400
		.35.000	.7930
		.60.000	.5480
		.225.000	-.1640
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.280	X/LNM	PHI
		.200	.400
		.35.000	.7260
		.60.000	.5640
		.225.000	-.1620
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -1.170	X/LNM	PHI
		.200	.400
		.35.000	.2040
		.60.000	.4030
		.225.000	-.2570
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.940	X/LNM	PHI
		.200	.400
		.35.000	-.1980
		.60.000	-.0078
		.225.000	-.2398
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 8.060	X/LNM	PHI
		.200	.400
		.35.000	-.2250
		.60.000	-.1810
		.225.000	-.2270
MACH ( 2 ) = 2.000	BETAT ( 1 ) = 8.360	X/LNM	PHI
		.200	.400
		.35.000	.4360
		.60.000	.5820
		.225.000	.1560

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AVES 37-707 1A9 02A + S3 + T9 OMS NOZZLE

(RBOE23)

SECTION 1 110MS NOZZLE

DEPENDENT VARIABLE CP

MACH (2) = 2.1000 BETAT (2) = -6.330	X/LNM	.200	.400
	PHI		
	135.000	.6320	
	180.000	.4010	.7210
MACH (2) = 2.1000 BETAT (3) = -4.280	225.000	.0360	
	X/LNM	.200	.400
	PHI		
	135.000	.5990	
MACH (2) = 2.1000 BETAT (4) = -3.170	180.000	.4400	.8210
	225.000	.0650	
	X/LNM	.200	.400
	PHI		
MACH (2) = 2.1000 BETAT (5) = 3.990	135.000	.3050	
	180.000	.4490	.3960
	225.000	-.0510	
	X/LNM	.200	.400
MACH (2) = 2.1000 BETAT (6) = 5.900	PHI		
	135.000	.0280	
	180.000	.3220	.0550
	225.000	-.1340	
MACH (2) = 2.1000 BETAT (7) = 8.040	X/LNM	.200	.400
	PHI		
	135.000	-.0680	
	180.000	.2950	-.0200
MACH (2) = 2.1000 BETAT (7) = 8.040	225.000	-.1550	
	X/LNM	.200	.400
	PHI		
	135.000	-.0780	
MACH (2) = 2.1000 BETAT (7) = 8.040	180.000	.1430	-.0410
	225.000	-.1780	
	X/LNM	.200	.400

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AWES 97-747 1A9 ORA + S3 + T9 OMS NOZZLE

(RBOE24) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.3300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .1304 SCALE

SECTION ( 1 ) OMS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.330

DEPENDENT VARIABLE CP  
X/LNM .200 .400  
PHI  
135.000 .3760  
180.000 .4810  
225.000 -.0730

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.290

X/LNM .200 .400  
PHI  
135.000 .6830  
180.000 .5300  
225.000 -.4710

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

X/LNM .200 .400  
PHI  
135.000 .6080  
180.000 .4910  
225.000 -.1640

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.150

X/LNM .200 .400  
PHI  
135.000 .1440  
180.000 .2810  
225.000 -.1040

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

X/LNM .200 .400  
PHI  
135.000 -.1870  
180.000 -.0750  
225.000 -.2320

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.980

X/LNM .200 .400  
PHI  
135.000 -.1720  
180.000 .1210  
225.000 -.2030

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.030

X/LNM .200 .400  
PHI  
135.000 -.2290  
180.000 -.1150  
225.000 -.2290

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .000  
RUDDER = 15.000 ELEVON = .000  
RUDFLR = .000

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 ORA + S3 + T9 OWS NOZZLE

(RBOE24)

## SECTION ( 1 ) OWS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.310 X/LNM .250 .400  
 PHI  
 135.000 .3820  
 180.000 .4130 .5530  
 225.000 .1580

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -0.270 X/LNM .200 .400  
 PHI  
 135.000 .4320  
 180.000 .4620 .6630  
 225.000 .1030

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -0.230 X/LNM .200 .400  
 PHI  
 135.000 .5180  
 180.000 .4130 .6980  
 225.000 .1400

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.180 X/LNM .200 .400  
 PHI  
 135.000 .3740  
 180.000 .3980 .2830  
 225.000 -.1130

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.920 X/LNM .200 .400  
 PHI  
 135.000 -.5100  
 180.000 .2540 -.1400  
 225.000 -.1570

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980 X/LNM .200 .400  
 PHI  
 135.000 -.1080  
 180.000 .1500 -.0640  
 225.000 -.1810

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.030 X/LNM .200 .400  
 PHI  
 135.000 -.1070  
 180.000 .1050 -.1170  
 225.000 -.1940

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

(RBOE25) ( 24 MAY 73 )

AMES 97-7J7 1A9 OCA + S3 + T9 OMS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.3300 INCHES  
LREF = 39.8450 INCHES YMRP = .0000 INCHES  
BREF = 33.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0001 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .000  
RUDDER = 15.000 ELEVON = .000  
RUFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -0.320  
X/LNM .200 .400  
PHI  
135.000 .5120  
180.000 .4400 .5300  
225.000 -.1080

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -0.270  
X/LNM .200 .400  
PHI  
135.000 .5040  
180.000 .4670 .2320  
225.000 -.1930

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -0.240  
X/LNM .200 .400  
PHI  
135.000 .4520  
180.000 .3760 .0460  
225.000 -.2280

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.130  
X/LNM .200 .400  
PHI  
135.000 .1690  
180.000 .1570 -.1470  
225.000 -.2720

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.950  
X/LNM .200 .400  
PHI  
135.000 -.0160  
180.000 .0890 -.1890  
225.000 -.2730

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990  
X/LNM .200 .400  
PHI  
135.000 -.1320  
180.000 .0380 -.2030  
225.000 -.2740

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.040  
X/LNM .200 .400  
PHI  
135.000 -.2340  
180.000 -.1060 -.2420  
225.000 -.2570

DATE 21 SEP 79

TABULATED PRESSURE DATA - 1A98

ANES 97-707 1A9 02A + S3 + T9 OMS NOZZLE

(RBOE25)

SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 1 ) = -0.290	X/LNM PHI	.200	.400
		135.000	.2200	
		180.000	.2010	.4320
		225.000	.0730	
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	X/LNM PHI	.200	.400
		135.000	.2750	
		180.000	.3470	.6040
		225.000	.0330	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.210	X/LNM PHI	.200	.400
		135.000	.3680	
		180.000	.3450	.5040
		225.000	-.0260	
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.140	X/LNM PHI	.200	.400
		135.000	.2980	
		180.000	.3250	.1700
		225.000	-.1380	
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.950	X/LNM PHI	.200	.400
		135.000	.0200	
		180.000	.2260	-.0560
		225.000	-.1690	
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.020	X/LNM PHI	.200	.400
		135.000	-.1340	
		180.000	-.0400	-.1580
		225.000	-.1930	

(RBOE26) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUDEFL = .000

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-757 1A9 02A + S3 + T9 OMS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE  
 MACH ( 1 ) = 1.555 BETAT ( 1 ) = -9.300  
 X/LNM .200 .400  
 PHI  
 135.000 .3150  
 180.000 .3930  
 225.000 -.1260

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.260  
 X/LNM .200 .400  
 PHI  
 135.000 .3250  
 180.000 .3730  
 225.000 -.2090

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220  
 X/LNM .200 .400  
 PHI  
 135.000 .2760  
 180.000 .2620  
 225.000 -.1700

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120  
 X/LNM .200 .400  
 PHI  
 135.000 -.0090  
 180.000 .0340  
 225.000 -.1970

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.960  
 X/LNM .200 .400  
 PHI  
 135.000 -.0100  
 180.000 .0630  
 225.000 -.1990

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000  
 X/LNM .200 .400  
 PHI  
 135.000 -.1190  
 180.000 .0370  
 225.000 -.2130

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.050  
 X/LNM .200 .400  
 PHI  
 135.000 -.2280  
 180.000 -.1190  
 225.000 -.2550

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

PAGE 520

ANES 97-707 1A9 02A + S3 + T9 OMS NOZZLE

(R8J226)

## SECTION ( 1 ) OMS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.280

X/LNM	.200	.400
PHI		
135.000	.0680	
180.000	.0140	.0970
225.000	.0950	

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -0.230

X/LNM	.200	.400
PHI		
135.000	.1270	
180.000	.2190	.5080
225.000	.0370	

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -0.200

X/LNM	.200	.400
PHI		
135.000	.2070	
180.000	.2970	.3790
225.000	-.0510	

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.120

X/LNM	.200	.400
PHI		
135.000	.1950	
180.000	.1860	.1000
225.000	-.1520	

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950

X/LNM	.200	.400
PHI		
135.000	.0280	
180.000	.2170	-.0560
225.000	-.1860	

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.950

X/LNM	.200	.400
PHI		
135.000	-.0260	
180.000	.0740	-.1190
225.000	-.2140	

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 0.030

X/LNM	.200	.400
PHI		
135.000	-.1890	
180.000	-.1670	-.1810
225.000	-.2180	



DATE 21 SEP 73

ADJUSTED PRESSURE DATA - 1A98

REBOE27: ( 24 MAY 73 )

AMES 97-707 IAS Q2A + S3 + 79 OMS NOZZLE

PARAMETRIC DATA

ALPHAT = 6.140 ORBINC = 0.00  
RUDDER = 15.140 ELEVON = 0.00  
RUOFLR = 0.00

REFERENCE DATA

SREP = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = 0.0000 INCHES  
SREP = 39.8490 INCHES ZMRP = 0.0000 INCHES  
SCALE = .1350 SCALE

SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.330  
X/LNM .200 .400  
PHI  
135.000 .2140  
180.000 .3480  
225.000 -.1530

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270  
X/LNM .200 .400  
PHI  
135.000 .2510  
180.000 .3680  
225.000 -.2320

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230  
X/LNM .200 .400  
PHI  
135.000 .1980  
180.000 .2700  
225.000 -.0520

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110  
X/LNM .200 .400  
PHI  
135.000 -.0550  
180.000 -.1490  
225.000 -.2670

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990  
X/LNM .200 .400  
PHI  
135.000 -.0070  
180.000 .0730  
225.000 -.1860

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.030  
X/LNM .200 .400  
PHI  
135.000 -.3180  
180.000 .1070  
225.000 -.2170

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.090  
X/LNM .200 .400  
PHI  
135.000 -.2380  
180.000 -.1790  
225.000 -.2630

(RUC27)

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
ANES 97-7J7 1A9 C8A + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.300	X/LNM	.200 .400
		PHI	
		135.000	-.1220
		180.000	-.0110
		225.000	.0250
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	X/LNM	.200 .400
		PHI	
		135.000	.0590
		180.000	.0670
		225.000	.0330
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.200	X/LNM	.200 .400
		PHI	
		135.000	.1420
		180.000	.2790
		225.000	-.0410
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.120	X/LNM	.200 .400
		PHI	
		135.000	.1510
		180.000	.1380
		225.000	-.1520
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.970	X/LNM	.200 .400
		PHI	
		135.000	.0260
		180.000	.1820
		225.000	-.1890
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.030	X/LNM	.200 .400
		PHI	
		135.000	.0030
		180.000	.0670
		225.000	-.2020
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.070	X/LNM	.200 .400
		PHI	
		135.000	.0770
		180.000	-.1210
		225.000	-.2110

(RBOE28) ( 24 MAY 73 )

## PARAMETRIC DATA

ALPHAT = 8.5.00 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUDEFLR = .000

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 AMES 97-757 1A9 02A + 53 + T9 0MS NOZZLE

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## DEPENDENT VARIABLE CP

SECTION ( 1 ) 0MS NOZZLE X/LNM .200 .400  
 PHI

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -0.350  
 135.000 .1390  
 180.000 .0340  
 225.000 -.2240

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -0.300  
 X/LNM .200 .400  
 PHI  
 135.000 .1560  
 180.000 .2970  
 225.000 -.0650

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -0.250  
 X/LNM .200 .400  
 PHI  
 135.000 .0890  
 180.000 .2450  
 225.000 -.1870

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110  
 X/LNM .200 .400  
 PHI  
 135.000 -.0610  
 180.000 -.2160  
 225.000 -.2600

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 4.000  
 X/LNM .200 .400  
 PHI  
 135.000 -.0070  
 180.000 .0450  
 225.000 -.1680

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000  
 X/LNM .200 .400  
 PHI  
 135.000 -.1180  
 180.000 -.0520  
 225.000 -.2290

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.130  
 X/LNM .200 .400  
 PHI  
 135.000 -.2130  
 180.000 -.1740  
 225.000 -.2620

(RBOE28)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.320  
X/LNM .200 .400  
PHI  
135.000 -.1680  
180.000 .0000  
225.000 -.1100

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260  
X/LNM .200 .400  
PHI  
135.000 -.0240  
180.000 .0000  
225.000 -.0790

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210  
X/LNM .200 .400  
PHI  
135.000 .0560  
180.000 .2180  
225.000 -.0590

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.110  
X/LNM .200 .400  
PHI  
135.000 .2190  
180.000 .1380  
225.000 -.1440

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990  
X/LNM .200 .400  
PHI  
135.000 .0520  
180.000 .1630  
225.000 -.1880

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.090  
X/LNM .200 .400  
PHI  
135.000 .0100  
180.000 .0580  
225.000 -.2040

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 0.110  
X/LNM .200 .400  
PHI  
135.000 .1410  
180.000 -.0380  
225.000 -.2160

(RBOFD1) ( 24 MAY 73 )

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B  
AMES 97-707 1A9 O2A + S3 + T9 BODY FLAP

PARAMETRIC DATA

BETAT = .0000 ORBINC = .5000  
RUDDER = .0000 ELEVON = .0000  
RUDFLR = .0000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555 ALPHAT( 1 ) = -8.400 X/LB 1.039  
PHI .000 -0.1130  
40.000 -0.1350

MACH ( 1 ) = 1.555 ALPHAT( 2 ) = -6.330 X/LB 1.039  
PHI .000 -0.1000  
40.000 -0.1350

MACH ( 1 ) = 1.555 ALPHAT( 3 ) = -4.250 X/LB 1.039  
PHI .000 -0.0920  
40.000 -0.1270

MACH ( 1 ) = 1.555 ALPHAT( 4 ) = -2.180 X/LB 1.039  
PHI .000 -0.0770  
40.000 -0.1180

MACH ( 1 ) = 1.555 ALPHAT( 5 ) = -.120 X/LB 1.039  
PHI .000 -0.0680  
40.000 -0.0940

MACH ( 1 ) = 1.555 ALPHAT( 6 ) = 1.950 X/LB 1.039  
PHI .000 -0.0550  
40.000 -0.0750

MACH ( 1 ) = 1.555 ALPHAT( 7 ) = 4.010 X/LB 1.039  
PHI .000 -0.0520  
40.000 -0.0740

MACH ( 1 ) = 1.555 ALPHAT( 8 ) = 6.060 X/LB 1.039  
PHI .000 -0.0430  
40.000 -0.0740

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
ANES 97-707 1A9 Q2A + S3 + T9 BODY FLAP (RBOF01)

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.955	ALPHAT( 9 ) = 0.130	X/LB	1.039
		PHI	
		.000	-.0370
		40.000	-.0540
MACH ( 2 ) = 2.000	ALPHAT( 1 ) = -0.380	X/LB	1.039
		PHI	
		.000	-.1000
		40.000	-.1090
MACH ( 2 ) = 2.000	ALPHAT( 2 ) = -0.310	X/LB	1.039
		PHI	
		.000	-.0910
		40.000	-.1100
MACH ( 2 ) = 2.000	ALPHAT( 3 ) = -4.250	X/LB	1.039
		PHI	
		.000	-.0800
		40.000	-.1070
MACH ( 2 ) = 2.000	ALPHAT( 4 ) = -2.210	X/LB	1.039
		PHI	
		.000	-.0800
		40.000	-.1030
MACH ( 2 ) = 2.000	ALPHAT( 5 ) = -.160	X/LB	1.039
		PHI	
		.000	-.0750
		40.000	-.0890
MACH ( 2 ) = 2.000	ALPHAT( 6 ) = 1.890	X/LB	1.039
		PHI	
		.000	-.0680
		40.000	-.0840
MACH ( 2 ) = 2.000	ALPHAT( 7 ) = 3.930	X/LB	1.039
		PHI	
		.000	-.0550
		40.000	-.0870
MACH ( 2 ) = 2.000	ALPHAT( 8 ) = 5.960	X/LB	1.039
		PHI	
		.000	-.0380
		40.000	-.0730

AMES 97-717 1A9 C2A ♦ S3 ♦ T9 BODY FLAP

section / BODY FLAP	DEPENDENT VARIABLE CP
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
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33	33
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64	64
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70	70
71	71
72	72
73	73
74	74
75	75
76	76
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78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

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MACH ( 2 ) = 2.1300 ALPHAT( 9 ) = 0.0200
X/BT 1.030
IHI
-0.0200
-0.0600

```

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1498

ANES 97-707 1A9 OBA + S3 + T9 BODY FLAP (RBOF02) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8480 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 8.0000 ORBINC = .900  
 RUDDER = .0000 ELEVON = .000  
 RUDFLR = .0000

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.140	X/LB	PHI
		1.039	.000
			40.000
			.0136
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -5.100	X/LB	PHI
		1.039	.000
			40.000
			.0190
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.080	X/LB	PHI
		1.039	.000
			40.000
			.0250
			40.000
			-.0200
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.110	X/LB	PHI
		1.039	.000
			40.000
			-.0080
			40.000
			-.0930
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.140	X/LB	PHI
		1.039	.000
			40.000
			-.0340
			40.000
			-.1170
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.190	X/LB	PHI
		1.039	.000
			40.000
			-.0280
			40.000
			-.1330
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.320	X/LB	PHI
		1.039	.000
			40.000
			-.0390
			40.000
			-.1680
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	X/LB	PHI
		1.039	.000
			40.000
			-.0350
			40.000
			-.1170



(RBOF:2)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-757 1A9 O2A + S3 + T9 BODY FLAP

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.210	X/LB PHI	1.039
		.000	-.0190
		40.000	-.0810
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.990	X/LB PHI	1.039
		.000	-.0540
		40.000	-.0760
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 6.060	X/LB PHI	1.039
		.000	-.0610
		40.000	-.0950
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.120	X/LB PHI	1.039
		.000	-.0710
		40.000	-.0880

DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A98

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ANES 97-707 1A9 05A + S3 + T9 BODY FLAP

(R80F03) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.3300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = .1440 ORBINC = .500  
 RUDDER = .0000 ELEVON = .000  
 RUDFLR = .1400

## SECTION ( 1 ) BODY FLAP

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.120	X/LB	PHI
		1.039	
		.000	-.0320
		40.000	-.0030
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -5.070	X/LB	PHI
		1.039	
		.000	-.0180
		40.000	.0300
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.020	X/LB	PHI
		1.039	
		.000	-.0380
		40.000	-.0180
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.060	X/LB	PHI
		1.039	
		.000	7.0250
		40.000	-.1030
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.110	X/LB	PHI
		1.039	
		.000	-.0430
		40.000	-.1240
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.140	X/LB	PHI
		1.039	
		.000	-.0420
		40.000	-.1420
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.300	X/LB	PHI
		1.039	
		.000	-.0580
		40.000	-.1780
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	X/LB	PHI
		1.039	
		.000	-.0510
		40.000	-.1300

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 06A + S3 + T9 BODY FLAP (RBOFT13)

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.200	X/LB PHI	1.039
		.000	-.0360
		40.000	-.0920
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.970	X/LB PHI	1.039
		.000	-.0620
		40.000	-.0860
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 6.030	X/LB PHI	1.039
		.000	-.0739
		40.000	-.1020
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.080	X/LB PHI	1.039
		.000	-.0910
		40.000	-.0960

DATE 21 SEP 75

TABULATED PRESSURE DATA - 1A9B  
AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

(RBOF04) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500  
RUDDER = .000 ELEVON = .000  
RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XGRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YGRP = .0000 INCHES  
BREF = 39.8490 INCHES ZGRP = .0000 INCHES  
SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.090  
X/LB 1.039  
PHI .000  
40.000 -.0320  
40.000 -.0320

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070  
X/LB 1.039  
PHI .000  
40.000 -.0180  
40.000 .0140

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.040  
X/LB 1.039  
PHI .000  
40.000 -.0490  
40.000 -.0510

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.080  
X/LB 1.039  
PHI .000  
40.000 -.0160  
40.000 -.1020

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.090  
X/LB 1.039  
PHI .000  
40.000 -.0250  
40.000 -.1140

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.100  
X/LB 1.039  
PHI .000  
40.000 -.0460  
40.000 -.1630

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.270  
X/LB 1.039  
PHI .000  
40.000 -.0570  
40.000 -.1850

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.240  
X/LB 1.039  
PHI .000  
40.000 -.1640  
40.000 -.1240

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 Q2A + S3 + T9 BODY FLAP (RBOF04)

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.200	X/LB 1.039	PHI .000	-.0450	40.000	-.0770
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.990	X/LB 1.039	PHI .000	-.0680	40.000	-.0960
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.990	X/LB 1.039	PHI .000	-.0840	40.000	-.1150
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.030	X/LB 1.039	PHI .000	-.1000	40.000	-.1090

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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ANES 97-707 1A9 OEA + 33 + T9 BODY FLAP

(RBOF05) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 2.020 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUOFLR = .000

## SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.100	X/LB	1.039
		PHI	
		.000	-.0310
		40.000	-.0930
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -5.070	X/LB	1.039
		PHI	
		.000	-.0310
		40.000	-.0190
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.040	X/LB	1.039
		PHI	
		.000	-.0420
		40.000	-.0650
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.050	X/LB	1.039
		PHI	
		.000	-.0240
		40.000	-.1080
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.070	X/LB	1.039
		PHI	
		.000	-.0450
		40.000	-.1140
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.090	X/LB	1.039
		PHI	
		.000	-.1060
		40.000	-.1820
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.280	X/LB	1.039
		PHI	
		.000	-.0650
		40.000	-.1520
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	X/LB	1.039
		PHI	
		.000	-.0640
		40.000	-.1110

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

PAGE 535

AMES 97-707 1A9 QEA + S3 + T9 BODY FLAP

(RBOF15)

SECTION ( 1 ) BODY FLAP

DEPENDENT VARIABLE CF

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.140

X/LB	1.039
PHI	
.000	-.0550
40.000	-.0790

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.940

X/LB	1.039
PHI	
.000	-.0780
40.000	-.1160

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.980

X/LB	1.039
PHI	
.000	-.1090
40.000	-.1240

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 0.020

X/LB	1.039
PHI	
.000	-.1020
40.000	-.1180

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A99

AMES 97-757 1A9 C2A + S3 + T9 BODY FLAP

(RBD07116) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = .0000 ORBINC = .5000  
 RUDDER = .0000 ELEVON = .0000  
 RUOFLR = .0000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 L'REF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.100	X/LB	PHI
		1.039	
		.0000	-.0410
		40.000	-.1100
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -5.080	X/LB	PHI
		1.039	
		.0000	-.0470
		40.000	-.0560
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.060	X/LB	PHI
		1.039	
		.0000	-.0490
		40.000	-.0490
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.050	X/LB	PHI
		1.039	
		.0000	-.0330
		40.000	-.1070
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.060	X/LB	PHI
		1.039	
		.0000	-.0660
		40.000	-.1100
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.090	X/LB	PHI
		1.039	
		.0000	-.1120
		40.000	-.1750
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.290	X/LB	PHI
		1.039	
		.0000	-.0780
		40.000	-.1700
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	X/LB	PHI
		1.039	
		.0000	-.0790
		40.000	-.1080



(RBOF16)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A99  
 AWC5 97-707 1A9 Q2A + S3 + T9 BODY FLAP

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) BODY FLAP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -.130	X/LB	1.039
		PHI	
		.000	-.0980
		40.000	-.0990
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 0.950	X/LB	1.039
		PHI	
		.000	-.0890
		40.000	-.1160
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 0.900	X/LB	1.039
		PHI	
		.000	-.0890
		40.000	-.1270

AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

(RBOF07) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = -2.0000 ORBING = .9000  
 RUDDER = .0000 ELEVON = .0000  
 RUFLR = .0000

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.110	X/LB	1.039
		PHI	
		.000	-.0680
		40.000	-.1140
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -5.090	X/LB	1.039
		PHI	
		.000	-.0630
		40.000	-.0550
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.070	X/LB	1.039
		PHI	
		.000	-.0480
		40.000	-.0800
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.040	X/LB	1.039
		PHI	
		.000	-.0730
		40.000	-.1190
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.060	X/LB	1.039
		PHI	
		.000	-.0800
		40.000	-.1210
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.080	X/LB	1.039
		PHI	
		.000	-.1150
		40.000	-.1550
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.310	X/LB	1.039
		PHI	
		.000	-.0960
		40.000	-.2040
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.260	X/LB	1.039
		PHI	
		.000	-.1130
		40.000	-.1940

DATE 21 SEP 73 TADULATED PRESSURE DATA - 1A9B (RBOFTD)

AMES 97-757 1A9 02A + S3 + T9 BODY FLAP

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.0000 BETAT ( 3 ) = -4.2300 X/LB 1.039  
PHI  
.0000 -.0950  
40.0000 -.1190

MACH ( 2 ) = 2.0000 BETAT ( 4 ) = 3.9400 X/LB 1.039  
PHI  
.0000 -.1020  
40.0000 -.1320

MACH ( 2 ) = 2.0000 BETAT ( 5 ) = 5.9700 X/LB 1.039  
PHI  
.0000 -.1240  
40.0000 -.1380

MACH ( 2 ) = 2.0000 BETAT ( 6 ) = 8.0100 X/LB 1.039  
PHI  
.0000 -.1280  
40.0000 -.1470

(RBOFT08) ( 24 MAY 73 )

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

PARAMETRIC DATA

ALPHAT = -4.1000 ORBINC = .5000  
RUDDER = .0000 ELEVON = .0000  
RUDFLR = .0000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.130	X/LB	PHI	1.039
		.000		-.1130
		40.000		-.1780
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.150	X/LB	PHI	1.039
		.000		-.0730
		40.000		-.0940
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.070	X/LB	PHI	1.039
		.000		-.0610
		40.000		-.0840
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.030	X/LB	PHI	1.039
		.000		-.0700
		40.000		-.1400
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.030	X/LB	PHI	1.039
		.000		-.1110
		40.000		-.1110
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.070	X/LB	PHI	1.039
		.000		-.1180
		40.000		-.1840
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.310	X/LB	PHI	1.039
		.000		-.1210
		40.000		-.2070
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	X/LB	PHI	1.039
		.000		-.1380
		40.000		-.2110

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-757 1A9 C2A + S3 + T9 BODY FLAP (RBOFU8)

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.230	X/LB PHI	1.039 -.1220
		.000 40.000	-.1240
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.920	X/LB PHI	1.039 -.1180
		.000 40.000	-.1450
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.960	X/LB PHI	1.039 -.1450
		.000 40.000	-.1530
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.010	X/LB PHI	1.039 -.1440
		.000 40.000	-.1580

APES 97-707 1A9 02A + S3 + T9 BODY FLAP

(RBOF09) ( 24 MAY 73 )

## REFERENCE DATA

SEEF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = -6.0000 ORBINC = .5000  
 RUDDER = .0000 ELEVON = .0000  
 RUFLR = .0000

## SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.160	X/LB	1.039
		PHI	
		.000	-.1230
		40.000	-.1960
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.170	X/LB	1.039
		PHI	
		.000	-.0930
		40.000	-.1070
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.180	X/LB	1.039
		PHI	
		.000	-.0590
		40.000	-.0970
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 3.640	X/LB	1.039
		PHI	
		.000	-.0790
		40.000	-.1370
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 5.690	X/LB	1.039
		PHI	
		.000	-.0840
		40.000	-.1400
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 7.740	X/LB	1.039
		PHI	
		.000	-.1390
		40.000	-.1230
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.340	X/LB	1.039
		PHI	
		.000	-.1100
		40.000	-.2020
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.300	X/LB	1.039
		PHI	
		.000	-.1420
		40.000	-.2140

(RBOF09)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

SECTION ( 1 ) BODY FLAP  
DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.250	X/LB	1.039
		PHI	
		.000	-.1260
		40.000	-.1190
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.930	X/LB	1.039
		PHI	
		.000	-.1300
		40.000	-.1460
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 8.020	X/LB	1.039
		PHI	
		.000	-.1400
		40.000	-.1650

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

(REF10) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -8.0000 CRPING = .0000  
 RCDPER = .0000 ELEVON = .0000  
 RCDPLT = .0000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XGRP = 25.3300 INCHES  
 YREF = 99.8450 INCHES YGRP = .0000 INCHES  
 ZREF = 99.8450 INCHES ZGRP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.200	X/LB	PHI
		1.039	
		.000	-.1360
		40.000	-.1920
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.200	X/LB	PHI
		1.039	
		.000	-.1100
		40.000	-.1240
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.200	X/LB	PHI
		1.039	
		.000	-.1220
		40.000	-.1350
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 3.650	X/LB	PHI
		1.039	
		.000	-.0950
		40.000	-.1440
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 5.700	X/LB	PHI
		1.039	
		.000	-.0850
		40.000	-.1390
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 7.770	X/LB	PHI
		1.039	
		.000	-.1570
		40.000	-.1370
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.390	X/LB	PHI
		1.039	
		.000	-.1280
		40.000	-.2040
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.390	X/LB	PHI
		1.039	
		.000	-.1410
		40.000	-.2100



DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B

(RBOF10)

AMES 97-717 1A9 OCA + S3 + T9 BODY FLAP

SECTION ( 1 ) BODY FLAP DEFENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280 X/LB 1.039  
PHI .000 -.1340  
40.000 -.1220

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.370 X/LB 1.039  
PHI .000 -.1020  
40.000 -.1100

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.940 X/LB 1.039  
PHI .000 -.1370  
40.000 -.1500

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980 X/LB 1.039  
PHI .000 -.1410  
40.000 -.1570

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.090 X/LB 1.039  
PHI .000 -.1360  
40.000 -.1590

(RDOF11) / 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -8.000 GRBINC = .000  
 RODDER = -15.000 ELEVON = .000  
 RODFLR = .000

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 ANES 97-707 1A9 O2A + S3 + T9 BODY FLAP

REFERENCE DATA

SREF = 2.4210 SQ. FT. XNRF = 28.5300 INCHES  
 LEF = 39.6450 INCHES YNRF = .0000 INCHES  
 BREF = 39.6450 INCHES ZNRF = .0000 INCHES  
 SCALE = .0000 SCALE

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE OF

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.420	X/LB	1.039
		PHI	
		.000	-.1240
		40.000	-.1780
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.360	X/LB	1.039
		PHI	
		.000	-.0780
		40.000	-.1240
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.310	X/LB	1.039
		PHI	
		.000	-.1180
		40.000	-.1370
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.180	X/LB	1.039
		PHI	
		.000	-.1090
		40.000	-.1350
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.940	X/LB	1.039
		PHI	
		.000	-.0980
		40.000	-.1390
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.060	X/LB	1.039
		PHI	
		.000	-.1040
		40.000	-.1490
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.060	X/LB	1.039
		PHI	
		.000	-.1570
		40.000	-.1620
MACH ( 2 ) = 2.044	BETAT ( 1 ) = -8.390	X/LB	1.039
		PHI	
		.000	-.1370
		40.000	-.2100

(RBOF11)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B  
AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.340	X/LB	1.039
		PHI	.000
			.000
			-1.900
			40.000
			-20.900
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.290	X/LB	1.039
		PHI	.000
			.000
			1.1250
			40.000
			-1.280
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.180	X/LB	1.039
		PHI	.000
			.000
			-1.120
			40.000
			-1.220
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	X/LB	1.039
		PHI	.000
			.000
			-1.330
			40.000
			-1.370
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 9.980	X/LB	1.039
		PHI	.000
			.000
			-1.190
			40.000
			-1.420
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.040	X/LB	1.039
		PHI	.000
			.000
			-1.100
			40.000
			-1.680

(RBOF12) ( 24 MAY 73 )

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

PARAMETRIC DATA

ALPHAT = -4.0000 ORGINC = .500  
FUDDER = -15.0000 ELEVON = .000  
RUDEFL = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 28.3300 INCHES  
LREF = 15.8430 INCHES YREF = .0000 INCHES  
BREF = 39.8490 INCHES ZREF = .0000 INCHES  
SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.350	X/LB	PHI	1.039
		.000	-0.080	
		40.000	-0.167	
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.310	X/LB	PHI	1.039
		.000	-0.040	
		40.000	-0.090	
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.260	X/LB	PHI	1.039
		.000	-0.030	
		40.000	-0.070	
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -2.170	X/LB	PHI	1.039
		.000	-0.110	
		40.000	-0.140	
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.930	X/LB	PHI	1.039
		.000	-0.080	
		40.000	-0.160	
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	X/LB	PHI	1.039
		.000	-0.090	
		40.000	-0.030	
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.020	X/LB	PHI	1.039
		.000	-0.120	
		40.000	-0.120	
MACH ( 2 ) = 2.100	BETAT ( 1 ) = -8.320	X/LB	PHI	1.039
		.000	-0.110	
		40.000	-0.210	

(RBOF12)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
ANES 97-707 1A9 02A + S3 + TC BODY FLAP

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.280  
X/LB 1.039  
PHI .000 -.1310  
40.000 -.2050

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.240  
X/LB 1.039  
PHI .000 -.1120  
40.000 -.1270

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170  
X/LB 1.039  
PHI .000 -.0920  
40.000 -.1110

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.920  
X/LB 1.039  
PHI .000 -.1180  
40.000 -.1450

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980  
X/LB 1.039  
PHI .000 -.1130  
40.000 -.1470

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.030  
X/LB 1.039  
PHI .000 -.1060  
40.000 -.1680

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5340 INCHES  
 LEFF = 39.6490 INCHES YMRP = .0000 INCHES  
 B 2" = 39.6490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

PARAMETRIC DATA

ALPHAT = .0000 ORBINC = .5000  
 RUDDER = -15.0000 ELEVON = .0000  
 RUFLR = .0000

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.310	X/LB	1.039
		PHI	
		.000	-.0610
		40.000	-.1410
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.280	X/LB	1.039
		PHI	
		.000	-.0240
		40.000	-.0250
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	X/LB	1.039
		PHI	
		.000	-.0340
		40.000	-.0340
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.140	X/LB	1.039
		PHI	
		.000	-.0730
		40.000	-.0700
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 2.940	X/LB	1.039
		PHI	
		.000	-.0380
		40.000	-.0960
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.990	X/LB	1.039
		PHI	
		.000	-.0460
		40.000	-.0650
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.030	X/LB	1.039
		PHI	
		.000	-.0840
		40.000	-.0880
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.300	X/LB	1.039
		PHI	
		.000	-.0710
		40.000	-.1750

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AMES 97-707 1A9 02A + S3 + T9 BODY FLAP (R00F13)

9

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.260	X/LB 1.039	PHI
		.000	-.0890
		40.000	-.1530
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.220	X/LB 1.039	PHI
		.000	-.0760
		40.000	-.1020
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.140	X/LB 1.039	PHI
		.000	-.0750
		40.000	-.1040
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	X/LB 1.039	PHI
		.000	-.0880
		40.000	-.1210
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	X/LB 1.039	PHI
		.000	-.0870
		40.000	-.1260
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.020	X/LB 1.039	PHI
		.000	-.0630
		40.000	-.1230

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TABULATED PRESSURE DATA - 1A98

(RBOF14) ( 24 MAY 73 )

AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 4.0000 ORBINC = .5000  
 RUDDER = -15.0000 ELEVON = .0000  
 RUOFLR = .0000

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.300	X/LB	PHI
		1.039	
		.000	-.0190
		40.000	-.0530
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.260	X/LB	PHI
		1.039	
		.000	-.0100
		40.000	-.0120
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.220	X/LB	PHI
		1.039	
		.000	-.0440
		40.000	-.0160
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.120	X/LB	PHI
		1.039	
		.000	-.0470
		40.000	-.0710
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.990	X/LB	PHI
		1.039	
		.000	-.0330
		40.000	-.0920
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.000	X/LB	PHI
		1.039	
		.000	-.0300
		40.000	-.0940
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.040	X/LB	PHI
		1.039	
		.000	-.0340
		40.000	-.1900
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.290	X/LB	PHI
		1.039	
		.000	-.0330
		40.000	-.1670



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ABSULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

(R80F14)

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -0.250 X/LB 1.039  
PHI  
.000 -.0470  
40.000 -.1190

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.250 X/LB 1.039  
PHI  
.000 -.0560  
40.000 -.0800

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.130 X/LB 1.039  
PHI  
.000 -.0580  
40.000 -.0850

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 2.990 X/LB 1.039  
PHI  
.000 -.0710  
40.000 -.1070

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.990 X/LB 1.039  
PHI  
.000 -.0700  
40.000 -.1130

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 6.040 X/LB 1.039  
PHI  
.000 -.1070  
40.000 -.1080

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TABULATED PRESSURE DATA - 1A98

(RBOF15) ( 24 MAY 73 )

ANES 97-707 1A9 C2A + S3 + T9 BODY FLAP

PARAMETRIC DATA

ALPHAT = 6.000 ORBITNC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUDELR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 99.8490 INCHES YMRP = .0000 INCHES  
 BREF = 99.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .03100 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -6.320	X/LB	PHI
		1.039	
		.000	-.0130
		40.000	-.0630
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.280	X/LB	PHI
		1.039	
		.000	-.0240
		40.000	-.0320
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.230	X/LB	PHI
		1.039	
		.000	-.0360
		40.000	-.0370
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.120	X/LB	PHI
		1.039	
		.000	-.0310
		40.000	-.0580
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.970	X/LB	PHI
		1.039	
		.000	-.0420
		40.000	-.0760
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.030	X/LB	PHI
		1.039	
		.000	-.0410
		40.000	-.1060
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.080	X/LB	PHI
		1.039	
		.000	-.0320
		40.000	-.1450
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -6.260	X/LB	PHI
		1.039	
		.000	-.0370
		40.000	-.1100

AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBOC15) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUDELR = .000

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER BASE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.320	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2630	-.2670	-.2640	-.2640	.0000	-.2640	-.2680	-.3220	-.2940
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.280	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2630	-.2660	-.2610	-.2620	.0000	-.2640	-.2720	-.3140	-.2920
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.230	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2570	-.2610	-.2530	-.2530	.0000	-.2540	-.2570	-.2790	-.2790
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.120	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	1.2430	-.2450	-.2420	-.2430	.0000	-.2440	-.2290	-.2490	-.2540
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.970	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2460	-.2550	-.2490	-.2450	.0000	-.2480	-.2310	-.2530	-.2590
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.030	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2560	-.2580	-.2590	-.2530	.0000	-.2570	-.2290	-.2560	-.2640
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.080	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2650	-.2680	-.2690	-.2650	.0000	-.2660	-.2330	-.2680	-.2730
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -6.260	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1860	-.1890	-.1930	-.1910	.0000	-.1860	-.1890	-.2420	-.2090
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -4.210	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1890	-.1930	-.1930	-.1920	.0000	-.1890	-.1940	-.2350	-.2130
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -.130	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1820	-.1850	-.1880	-.1870	.0000	-.1860	-.1890	-.2130	-.2140

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TABULATED PRESSURE DATA - 1A58

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(RBOC15)

AMES 97-707 IAS CEA + 83 + T9 ORBITER BASE

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.970

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1870	-.1900	-.1920	.0000	-.1910	-.1860	-.2000	-.2000

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 6.020

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1820	-.1850	-.1860	.0000	-.1830	-.1730	-.2050	-.1920

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.070

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1880	-.1940	-.1930	.0000	-.1910	-.1800	-.2060	-.1990

AWES 97-757 1A9 02A + S3 + T9 ORBITER BASE

(RBOC16) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ. FT. YMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 8.0000 ORBINC = .500  
 RUDDER = -15.0000 ELEVON = .000  
 RUOFLR = .000

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER BASE

MACH	( 1 ) = 1.555	BETAT ( 1 ) = -8.350	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			A	.000	-.2670	-.2710	-.2680	.0000	-.2660	-.2640	-.3140	-.2870
MACH	( 1 ) = 1.555	BETAT ( 2 ) = -6.290	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			A	.000	-.2630	-.2660	-.2640	-.2590	.0000	-.2680	-.3040	-.2810
MACH	( 1 ) = 1.555	BETAT ( 3 ) = -4.240	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			A	.000	-.2560	-.2600	-.2530	-.2510	.0000	-.2570	-.2540	-.2750
MACH	( 1 ) = 1.555	BETAT ( 4 ) = -.110	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			A	.000	-.2410	-.2450	-.2400	-.2410	.0000	-.2440	-.2260	-.2510
MACH	( 1 ) = 1.555	BETAT ( 5 ) = 4.000	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			A	.000	-.2510	-.2540	-.2520	-.2470	.0000	-.2520	-.2380	-.2620
MACH	( 1 ) = 1.555	BETAT ( 6 ) = 6.060	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			A	.000	-.2630	-.2640	-.2630	-.2580	.0000	-.2620	-.2400	-.2700
MACH	( 1 ) = 1.555	BETAT ( 7 ) = 8.120	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			A	.000	-.2710	-.2730	-.2720	-.2700	.0000	-.2700	-.2450	-.2750
MACH	( 2 ) = 2.000	BETAT ( 1 ) = -8.340	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			A	.000	-.2560	-.2460	-.2480	-.2470	.0000	-.2450	-.2300	.0000
MACH	( 2 ) = 2.000	BETAT ( 2 ) = -6.270	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			A	.000	-.1880	-.1920	-.1930	-.1910	.0000	-.1870	-.1810	-.2300
MACH	( 2 ) = 2.000	BETAT ( 3 ) = -4.220	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			A	.000	-.1690	-.1920	-.1930	-.1930	.0000	-.1940	-.1930	-.2160

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TABULATED PRESSURE DATA - 1A98

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AWES 97-707 1A9 Q2A + S3 + T9 ORBITER BASE

(R80C16)

SECTION: ( 1 ) ORBITER BASE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.120	TAP NO 1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	-.1070	-.1910	-.1920	-.1920	.0000	1.1890	-.1920	-.2030
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.990	TAP NO 1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	-.1910	-.1970	-.1980	-.1960	.0000	-.1960	-.1990	-.2180
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.050	TAP NO 1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	-.1830	-.1860	-.1870	-.1850	.0000	-.1840	-.1800	-.1920
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.110	TAP NO 1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	-.1860	-.1930	-.1930	-.1920	.0000	-.1900	-.1970	-.2190

AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBOC17) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ. FT. YPRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = -8.0000 ORBINC = .5000  
 RUDDER = -10.0000 ELEVON = .0000  
 RUFLR = .0000

## DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.410	A	.000	-.2080	-.2160	-.2190	-.1960	.0000	-.2180	-.2890	-.2190
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.360	A	.000	-.2080	-.2160	-.2100	-.1960	.0000	-.2100	-.2760	-.2100
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.300	A	.000	-.2170	-.2260	-.2160	-.2020	.0000	-.2150	-.2740	-.2240
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.180	A	.000	-.2270	-.2340	-.2270	-.2180	.0000	-.2240	-.2530	-.2420
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.930	A	.000	-.2100	-.2200	-.2110	-.1960	.0000	-.2190	-.2050	-.2220
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990	A	.000	-.2140	-.2140	-.2110	-.1960	.0000	-.2140	-.2160	-.2150
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.050	A	.000	-.2180	-.2160	-.2120	-.1940	.0000	-.2270	-.2170	-.2140
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.380	A	.000	-.1900	-.1550	-.1530	-.1510	.0000	-.1460	-.1780	-.1860
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330	A	.000	-.1600	-.1640	-.1640	-.1620	.0000	-.1550	-.1820	-.1940
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280	A	.000	-.1600	-.1650	-.1640	-.1640	.0000	-.1540	-.1790	-.2180

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AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBOC17)

SECTION ( 1 ) ORBITER BASE		DEPENDENT VARIABLE CP									
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.170	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A	.000	-.1590	-.1620	-.1590	-.1560	.0000	-.1550	-.1660	-.1940	-.1700
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A	.000	-.1610	-.1690	-.1650	-.1630	.0000	-.1610	-.1620	-.1910	-.1780
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A	.000	-.1640	-.1690	-.1650	-.1650	.0000	-.1650	-.1610	-.1850	-.1760
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.048	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A	.000	-.1579	-.1630	-.1620	-.1590	.0000	-.1620	-.1470	-.1850	-.1710



AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBOC18) ( 24 MAY 73 )

**REFERENCE: DATA**

SREF = 2.4210 SQ. FT. XREF = 28.5300 INCHES  
LREF = 39.8490 INCHES YREF = .0000 INCHES  
BREF = 39.8490 INCHES ZREF = .0000 INCHES  
SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHAT =	-4.000	ORINC =	.500
RUDDER =	-10.000	ELEVON =	.000
RUDEFL =	.000		

## DEPENDENT VARIABLE CP

## SECTION (1) ORBITER BASE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.340	TAP NO A	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			-2290	-2370	-2270	-2190	.0000	-2180	-2310	-2290	-2420
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.300	TAP NO A	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			-2270	-2330	-2280	-2200	.0000	-2210	-2300	-2290	-2430
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.250	TAP NO A	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			-2290	-2390	-2280	-2170	.0000	-2290	-2310	-2790	-2440
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -1.600	TAP NO A	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			-2360	-2410	-2350	-2280	.0000	-2320	-2180	-2460	-2510
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.930	TAP NO A	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			-2230	-2330	-2280	-2130	.0000	-2290	-2120	-2200	-2370
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	TAP NO A	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			-2250	-2330	-2270	-2170	.0000	-2290	-2120	-2330	-2380
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 6.120	TAP NO A	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			-2240	-2300	-2250	-2160	.0000	-2290	-1940	-2350	-2350
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.320	TAP NO A	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			-1610	-1640	-1620	-1620	.0000	-1540	-1790	-2230	-1830
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	TAP NO A	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			-1710	-1750	-1750	-1730	.0000	-1670	-1880	-2360	-1990
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.230	TAP NO A	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
			-1700	-1740	-1740	-1730	.0000	-1640	-1870	-2230	-1950

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(RBOC10)

AMES 97-707 1A9 ORA + S3 + T9 OR ITER BASE

SECTION ( 1 ) ORBITER BASE		DEPENDENT VARIABLE CP									
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.160	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1700	-.1760	-.1740	-.1730	.0000	-.1690	-.1810	-.2020
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.920	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1750	-.1790	-.1800	-.1780	.0000	-.1780	-.1700	-.1900
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.960	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1710	-.1750	-.1760	-.1760	.0000	-.1710	-.1620	-.1850
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.010	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1660	-.1700	-.1700	-.1690	.0000	-.1680	-.1400	-.1830

DATE 21 SEP 73

-ABSULATED PRESSURE DATA - 1A98

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AVES 97-707 1A9 Q2A + S2 + 79 ORBITER BASE

(RBOC19) ( 24 MAY 73 )

## REFEREN DATA

SREF = 2.4210 SQ.FT. YMRP = 28.3300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHAT = .0000 ORBINC = .0000  
RUDDER = -10.0000 ELEVON = .0000  
RUDPLR = .0000

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER BASE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.320	TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000	
	A .000 -.2430 -.2500 -.2430 -.2390 .0000 -.2350 -.2480 -.2640	
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270	TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000	
	A .000 -.2350 -.2410 -.2360 -.2310 .0000 -.2300 -.2400 -.2610	
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240	TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000	
	A .000 -.2410 -.2470 -.2380 -.2310 .0000 -.2370 -.2410 -.2630	
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.140	TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000	
	A .000 -.2350 -.2400 -.2380 -.2320 .0000 -.2330 -.2210 -.2460	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.950	TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000	
	A .000 -.2310 -.2340 -.2330 -.2270 .0000 -.2310 -.2100 -.2390	
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990	TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000	
	A .000 -.2300 -.2360 -.2330 -.2280 .0000 -.2330 -.2190 -.2420	
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.040	TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000	
	A .000 -.2380 -.2420 -.2390 -.2350 .0000 -.2400 -.2020 -.2490	
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.300	TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000	
	A .000 -.1700 -.1750 -.1740 -.1720 .0000 -.1650 -.1810 -.2290	
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260	TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000	
	A .000 -.1770 -.1800 -.1830 -.1800 .0000 -.1740 -.1920 -.2330	
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220	TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000	
	A .000 -.1800 -.1830 -.1840 -.1830 .0000 -.1770 -.1930 -.2280	

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TABULATED PRESSURE DATA - 1A96  
 ARES 97-707 1A9 ORA + S3 + T9 ORBITER BASE

(RBOC19)

SECTION ( 1 ) ORBITER BASE		DEPENDENT VARIABLE CP											
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.140	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
	A	.000	-.1770	-.1820	-.1820	-.1790	.0000	-.1770	-.1810	-.2020	-.1940		
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
	A	.000	-.1770	-.1810	-.1830	-.1800	.0000	-.1790	-.1790	-.2010	-.1890		
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
	A	.000	-.1740	-.1780	-.1800	-.1760	.0000	-.1740	-.1630	-.1930	-.1860		
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.020	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
	A	.000	-.1790	-.1830	-.1840	-.1800	.0000	-.1800	-.1610	-.1930	-.1940		

DATE 21 SEP 73

ABLATED PRESSURE DATA - 1A99

AMES 97-707 1A9 Q2A + S3 + T9 ORBITER BASE

(RBOC20) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0350 SCALE

## PARAMETRIC DATA

ALPHAT = 4.0000 ORBINC = .0000  
 RUDDER = -10.0000 ELEVON = .0000  
 RUFLER = .0000

## DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE		TAP NO									
		1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.300	A	.000	-.2540	-.2520	-.2540	.0000	-.2520	-.2550	-.3020	-.2830
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.270	A	.000	-.2490	-.2520	-.2480	.0000	-.2480	-.2540	-.2900	-.2770
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.220	A	.000	-.2500	-.2530	-.2450	.0000	-.2450	-.2470	-.2880	-.2690
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.130	A	.000	-.2320	-.2350	-.2300	.0000	-.2300	-.2310	-.2330	-.2410
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.960	A	.000	-.2420	-.2450	-.2450	.0000	-.2430	-.2480	-.2480	-.2500
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.010	A	.000	-.2450	-.2460	-.2450	-.2430	.0000	-.2470	-.2500	-.2510
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.080	A	.000	-.2500	-.2590	-.2610	-.2570	.0000	-.2580	-.2700	-.2650
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.280	A	.000	-.1800	-.1850	-.1860	-.1830	.0000	-.1810	-.1890	-.1950
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.240	A	.000	-.1820	-.1850	-.1870	-.1860	.0000	-.1810	-.1880	-.2060
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.200	A	.000	-.1850	-.1890	-.1880	-.1880	.0000	-.1840	-.1910	-.2070

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TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBOC20)

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.130

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1800	-.1850	-.1840	.0000	.0000	-.1900	-.2080	-.1980

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1870	-.1910	-.1930	-.1910	.0000	-.1890	-.2130	-.2010

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.990

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1820	-.1840	-.1860	-.1850	.0000	-.1830	-.2150	-.1920

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1900	-.1960	-.1960	-.1940	.0000	-.1910	-.2170	-.2010

AMES 97-707 1A9 Q2A + S3 + T9 ORBITER BASE

(RBOC21) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0310 SCALE

## PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUDFLR = .000

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.330	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2580	-.2640	-.2580	-.2590	.0000	-.2570	-.2670	-.3100	1.2880
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.290	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2550	-.2600	-.2550	-.2550	.0000	-.2540	-.2580	-.2960	-.2830
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.230	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2510	-.2540	-.2490	-.2480	.0000	-.2500	-.2470	-.2820	-.2730
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.120	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2350	-.2370	-.2320	-.2350	.0000	-.2350	-.2250	-.2350	-.2450
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.980	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2440	-.2470	-.2460	-.2420	.0000	-.2450	-.2370	-.2540	-.2550
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.000	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2500	-.2520	-.2530	-.2490	.0000	-.2520	-.2270	-.2580	-.2640
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 6.110	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2620	-.2640	-.2650	-.2620	.0000	-.2610	-.2330	-.2680	-.2690
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.310	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1830	-.1870	-.1890	-.1870	.0000	-.1830	-.1830	-.2230	-.1980
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.280	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1880	-.1910	-.1930	-.1920	.0000	-.1870	-.1910	-.2400	-.2190
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.210	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1870	-.1910	-.1920	-.1920	.0000	-.1870	-.1920	-.2310	-.2110

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## TABULATED PRESSURE DATA - 1A9B

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AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBCC21)

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.120

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1800	-.1840	-.1860	-.1850	.0000	-.1820	-.1890	-.2080

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.970

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1880	-.1940	-.1960	-.1920	.0000	-.1930	-.1940	-.2140

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.020

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1860	-.1910	-.1930	-.1950	.0000	-.1890	-.2130	-.1970

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.070

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1920	-.1970	-.1980	-.1960	.0000	-.1950	-.2140	-.2030



REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES VMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0314 SCALE

PARAMETRIC DATA

ALPHAT = 8.0000 ORBINC = .0000  
 RUDDER = -10.0000 ELEVON = .0000  
 RUDDLR = .0000

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE		TAP NO									
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.360		1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A									
			-.2690	-.2700	-.2650	-.2660	.0000	-.2630	-.2620	-.3170	-.2850
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.310		1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A									
			-.2590	-.2620	-.2570	-.2560	.0000	-.2570	-.2630	-.3050	-.2790
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230		1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A									
			-.2520	-.2570	-.2530	-.2490	.0000	-.2530	-.2490	-.2840	-.2710
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110		1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A									
			-.2380	-.2410	-.2350	-.2350	.0000	-.2380	-.2220	-.2370	-.2460
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940		1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A									
			-.2480	-.2510	-.2510	-.2460	.0000	-.2490	-.2350	-.2620	-.2610
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.060		1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A									
			-.2560	-.2590	-.2590	-.2560	.0000	-.2570	-.2370	-.2630	-.2640
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.120		1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A									
			-.2680	-.2690	-.2730	-.2670	.0000	-.2680	-.2460	-.2750	-.2750
MACH ( 2 ) = 2.040 BETAT ( 1 ) = -8.330		1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A									
			-.1810	-.1850	-.1850	-.1840	.0000	-.1810	-.1710	-.2180	-.1980
MACH ( 2 ) = 2.040 BETAT ( 2 ) = -6.280		1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A									
			-.1870	-.1910	-.1930	-.1920	.0000	-.1870	-.1890	-.2260	-.2140
MACH ( 2 ) = 2.040 BETAT ( 3 ) = -4.220		1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A									
			-.1940	-.1930	-.1960	-.1940	.0000	-.1940	-.1930	-.2340	-.2190

AMES 97-707 LAS CBA + S3 + T9 ORBITER BASE

(RBOC22)

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 4 ) = -0.110	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1860	-.1890	-.1890	-.1890	.0000	-.1880	-.1920	-.2195	-.2010
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 4.000	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1900	-.1940	-.1960	-.1930	.0000	-.1940	-.1950	-.2150	-.2130
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.090	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1860	-.1910	-.1910	-.1880	.0000	-.1890	-.1840	-.2080	-.1950
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.110	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1900	-.1960	-.1940	-.1940	.0000	-.1930	-.1910	-.2210	-.1990

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TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 OCA + S3 + T9 ORBITER BASE

(RBOC23) ( 24 MAY 73 )

PARAMETRIC DATA

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .1440 INCHES  
BREF = 39.8490 INCHES ZMRP = .1440 INCHES  
SCALE = .0300 SCALE

ALPHAT = -8.0000 ORSINC = .0000  
RUDDER = 15.0000 ELEVON = .0000  
RUDDFLR = .0000

DEPENDENT VARIABLE CP

SECTION ( 1 ) ORBITER BASE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.400	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.360	A	1.000	-2180	-2270	-2190	-2030	.0000	-2010	-2310	-2920
			1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.290	A	1.000	-2160	-2250	-2170	-2040	.0000	-2090	-2230	-2880
			1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -3.170	A	1.000	-2280	-2360	-2260	-2120	.0000	-2210	-2360	-2870
			1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.940	A	1.000	-2420	-2520	-2440	-2350	.0000	-2380	-2490	-2740
			1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.160	A	1.000	-2180	-2270	-2170	-2080	.0000	-2280	-1940	-2130
			1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 2 ) = 2.040	BETAT ( 1 ) = -8.380	A	1.000	-2150	-2240	-2130	-2080	.0000	-2320	-1940	-2180
			1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 2 ) = 2.040	BETAT ( 2 ) = -6.330	A	1.000	-1540	-1590	-1580	-1550	.0000	-1510	-1830	-2300
			1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 2 ) = 2.040	BETAT ( 3 ) = -4.280	A	1.000	-1660	-1710	-1720	-1680	.0000	-1610	-1940	-2360
			1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 2 ) = 2.040	BETAT ( 4 ) = -3.170	A	1.000	-1610	-1670	-1660	-1610	.0000	-1530	-1810	-2230
			1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000

DATE 21 SEP 75

TABULATED PRESSURE DATA - 1A9B

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AMES 97-707 1A9 CEA + S3 + T9 ORBITER BASE

(RBOC23)

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1660	-.1710	-.1690	-.1675	.0000	-.1650	-.1710	-.1980

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1690	-.1740	-.1710	-.1710	.0000	-.1690	-.1670	-.1830

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1630	-.1690	-.1630	-.1640	.0000	-.1690	-.1540	-.1780

AMES 97-707 1A9 02A + S3 + T9 ORBITER BASE

(RBOC24) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.3300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

ALPHAT = -4.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUOFLR = .000

## PARAMETRIC DATA

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.330	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2330	-.2190	-.2310	-.2210	.0000	-.2220	-.2360	-.3050	-.2450
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.290	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2280	-.2340	-.2260	-.2200	.0000	-.2220	-.2280	-.2910	-.2420
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2330	-.2430	-.2310	-.2210	.0000	-.2340	-.2350	-.2830	-.2460
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.150	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2450	-.2520	-.2480	-.2390	.0000	-.2430	-.2410	-.2670	-.2620
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.940	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2280	-.2370	-.2330	-.2210	.0000	-.2290	-.2090	-.2240	-.2400
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2270	-.2350	-.2300	-.2250	.0000	-.2300	-.2160	-.2340	-.2400
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 6.030	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.2280	-.2330	-.2280	-.2190	.0000	-.2360	-.2010	-.2290	-.2370
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -6.310	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1620	-.1660	-.1650	-.1650	.0000	-.1530	-.1830	-.2280	-.1860
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1710	-.1750	-.1760	-.1730	.0000	-.1680	-.1910	-.2350	-.2000
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.230	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	
		A	.000	-.1740	-.1780	-.1780	-.1770	.0000	-.1690	-.1920	-.2300	-.1990

DATE 21 SEP 73

TABULATED PRESSURE DATA - IASB

(RBOC24)

ANES 87-707 IASB ORA + S3 + T9 ORBITER BASE

SECTION ( 1 ) ORBITER BASE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.160	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1720	-.1770	-.1750	-.1798	.0000	-.1720	-.1830	-.1860
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.920	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1780	-.1820	-.1800	-.1790	.0000	-.1790	-.1780	-.1920
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.960	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1750	-.1800	-.1800	-.1790	.0000	-.1750	-.1700	-.1680
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.010	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1700	-.1740	-.1730	-.1730	.0000	-.1710	-.1520	-.1850

DATE 21 SEP 73

LABORATORY PRESSURE DATA - 1A98

PAGE 375

AVES 07-707 1A9 02A + S2 + T9 ORBITER BASE

(RBOX25) ( 24 MAY 73 )

EQUATION ATZ

SREF = 2.4210 59.771 XREF = 20.5300 INCHES  
 LREF = 39.8490 2 INCHES YREF = 10.0000 INCHES  
 BREF = 39.8490 2 INCHES ZREF = 10.0000 INCHES  
 SCALE = .03125 SCALE

ALPHAT = .000 ORBINC = .000  
 RUDR = 15.000 ELEVON = .000  
 RUDFLR = .000

## PARAMETRIC DATA

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ORBITER BASE

MACH	( 1 ) = 1.555	BETAT ( 1 ) = -8.320	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
MACH ( 1 ) = 1.555	SETAT ( 2 ) = -6.270	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -1.130	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.950	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.950	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.000	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.290	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.210	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000	9.000

DATE 21 SEP 79 TABULATED PRESSURE DATA - 1A98

AMES 97-787 1A9 OSA + S3 + T9 ORBITER BASE (R80C22)

SECTION ( 1 ) ORBITER BASE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.140	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1780	-.1830	-.1820	-.1810	.0000	-.1780	-.1860	-.1950
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.990	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1820	-.1870	-.1890	-.1860	.0000	-.1840	-.1910	-.1970
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.000	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
		A	.000	-.1770	-.1800	-.1820	-.1790	.0000	-.1780	-.1820	-.1890



REGULATED PRESSURE DATA - 1A98

ESSURE DATA - IA98

(920065) (24 May 63)

— 43 —

20.9300 INCHES	WPS =	2.421	50.77
.0400 INCHES	WPS =	59	143.1 INCHES
.0400 INCHES	WPS =	59.8430	INCHES
	SCALE =	.0300	SCALE

DEPENDENT VARIABLE CP

SECTION 1) 8-BIT BASE

ADJUSTED R-SQUARED = 0.930

100

12-2-15: 4:00

121-11-240000

0963 = (5) - 1258 ...

$$6.9 = 6.9$$
$$\beta_{\text{STAT}}(7) = 0.0591$$
$$\Delta G^{\circ} = -2.144 \text{ kcal} \quad \Delta G^{\circ} (1') = -8.24:$$
$$\beta^*(2) = -6.23$$
$$-4.24$$

### PARAMETRIC DATA

ALPHAT =	4.000	ORBINC =	.000
RUDDER =	15.000	ELEVON =	.000
RUFFLER =	.000		

DEPENDENT VARIABLE

[illegible]

TAPE NO	1. (H)	2. (H)	3. (H)	4. (H)	5. (H)
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- .2530
- .2440
.1440
- .2460
- .2450

TAP NO	1. (H.H.)	2. (H.H.)	3. (H.H.)	4. (H.H.)	5. (H.H.)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

TAF NO	1. (L)	2. (L)	3. (L)	4. (L)

A

TAP NO	1. (1.0)	2. (1.0)	3. (1.0)
CN 1			

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2
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TAP NO	2.122	2.123	2.124	2.125

$\alpha = 2521 - 2541 = -20$   
 $\beta = -2431 - 2451 = -20$   
 $\gamma = -2091 - 2111 = -20$

[illegible][illegible]

TAF NO	1. (PR)	2. (AD)	3. (PR)

[illegible]

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Year	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

TAF ND 1.000 2.000

[illegible]

AMES 97-757 1A9 02A + S3 + T9 ORBITER BASE (RBOC26)

SECTION ( 1 ) ORBITER BASE

DEPENDENT VARIABLE CP

$$\text{WACH} (2) = 2.000 \text{ BETAT} (4) = -.120$$

TAP NO	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
A	-.1810	-.1860	-.1860	-.1860	.0000	-.1810	-.1920	-.2120	-.2510

**MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950**

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
7AP NO	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000	10,000	11,000	12,000	13,000	14,000	15,000	16,000	17,000	18,000	19,000	20,000	21,000	22,000	23,000	24,000	25,000	26,000	27,000	28,000	29,000	30,000	31,000	32,000	33,000	34,000	35,000	36,000	37,000	38,000	39,000	40,000	41,000	42,000	43,000	44,000	45,000	46,000	47,000	48,000	49,000	50,000	51,000	52,000	53,000	54,000	55,000	56,000	57,000	58,000	59,000	60,000	61,000	62,000	63,000	64,000	65,000	66,000	67,000	68,000	69,000	70,000	71,000	72,000	73,000	74,000	75,000	76,000	77,000	78,000	79,000	80,000	81,000	82,000	83,000	84,000	85,000	86,000	87,000	88,000	89,000	90,000	91,000	92,000	93,000	94,000	95,000	96,000	97,000	98,000	99,000	100,000						

A

$$\text{MACH} (2) = 2.000 \quad \text{BETAT} (6) = 5.990$$

TAP NO	1.0220	2.0000	3.0000	4.0220	5.0000	6.0220	7.0220	8.0220	9.0220
A	-1.0000	-1.0000	-1.0000	-1.0220	-1.0000	-1.0220	-1.0600	-2.0000	-2.0220

4

WACH : 2) = 2.000 BETA : 7) = 9.032

TAP NO	1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
A	0.000	-0.1910	-0.1960	-0.1900	-0.1950	-0.1910	-0.1870	-0.2000	-0.2040

◀



DATE 21 SEP 75

TABULATED PRESSURE DATA - 1A98

(RBOC27)

AMES 97-707 1A9 C2A - S3 - T9 ORBITER BASE

SECTION : 1) ORBITER BASE

DEPENDENT VARIABLE CP

MACH (2) = 2.000 BETAT (4) = -.120											
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
A	.000	-.1820	-.1870	-.1870	-.1880	.0000	-.1830	-.1940	-.2150	-.1980	
MACH (2) = 2.000 BETAT (5) = 3.970											
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
A	.000	-.1950	-.2010	-.2020	-.2000	.0000	-.1980	-.2040	-.2230	-.2110	
MACH (2) = 2.000 BETAT (6) = 6.030											
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
A	.000	-.1910	-.1950	-.1960	-.1950	.0000	-.1910	-.1930	-.2210	-.2020	
MACH (2) = 2.000 BETAT (7) = 8.070											
TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000		
A	.000	-.1950	-.2000	-.2010	-.1980	.0000	-.1980	-.1910	-.2160	-.2060	

DATE 01 SEP 75

RELATED PRESSURE DATA - 1498

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ALPHAT = 8.000 ORBINC = 0.000  
 PUDDER = 15.000 ELEVON = 0.000  
 RUDDER = 0.000

(RBOC28) ( 24 MAY 75 )

PARAMETRIC DATA

DEPENDENT VARIABLE OF

REF = 2.421- 51.000 INCHES  
 LREF = 33.849- 100.000 INCHES  
 REF = 39.849- 100.000 INCHES  
 SCALE = 100.000 SCALE

SECTION ( INFINITE BASE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.350

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.320

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -2.110

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 0.000

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 8.350

MACH ( 2 ) = 2.140 BETAT ( 1 ) = -8.320

MACH ( 2 ) = 2.140 BETAT ( 2 ) = -6.260

MACH ( 2 ) = 2.140 BETAT ( 3 ) = -4.210

DEPENDENT VARIABLE OF

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000  
 A -1.2630 -1.2730 -1.2690 -1.2700 -1.2660 -1.2680 -1.2620 -1.2690 -1.2610

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000  
 A -1.2630 -1.2650 -1.2680 -1.2680 -1.2680 -1.2680 -1.2650 -1.2620 -1.2610

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000  
 A -1.2520 -1.2560 -1.2490 -1.2480 -1.2480 -1.2510 -1.2520 -1.2520 -1.2680

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000  
 A -1.2420 -1.2440 -1.2410 -1.2390 -1.2410 -1.2410 -1.2410 -1.2470 -1.2510

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000  
 A -1.2560 -1.2610 -1.2580 -1.2570 -1.2570 -1.2570 -1.2570 -1.2720 -1.2680

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000  
 A -1.2630 -1.2660 -1.2660 -1.2660 -1.2660 -1.2660 -1.2660 -1.2690 -1.2720

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000  
 A -1.2630 -1.2630 -1.2630 -1.2630 -1.2630 -1.2630 -1.2630 -1.2690 -1.2690

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000  
 A -1.1800 -1.1850 -1.1840 -1.1830 -1.1830 -1.1830 -1.1790 -1.1730 -1.1960

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000  
 A -1.1840 -1.1890 -1.1910 -1.1890 -1.1890 -1.1890 -1.1850 -1.1900 -1.2260

TAP NO 1.000 2.000 3.000 4.000 5.000 6.000 7.000 8.000 9.000  
 A -1.1860 -1.1890 -1.1920 -1.1900 -1.1900 -1.1900 -1.1870 -1.1960 -1.2310

AMES 97-707 1A9 OCA + S3 + T9 ORBITER BASE

(RBOC28)

## SECTION ( 1 ) ORBITER BASE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.115

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1890	-.1930	-.1940	-.1920	-.0000	-.1900	-.1980	-.2040

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1970	-.2010	-.2030	-.2030	.0000	-.2030	-.2050	-.2120

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.050

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1920	-.1940	-.1970	-.1940	.0000	-.1920	-.1930	-.2040

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.115

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1920	-.1970	-.1990	-.1960	.0000	-.1950	-.1950	-.2040

DATE 21 SEP 73

QUALIFIED PRESSURE DATA - 1A9B

LOS 97-710 1A9 Q2A + S3 + T9 UPPER MPS NOZZLE

(RBOC11) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ. IN. XREF = 29.5300 INCHES  
 LREF = 39.8490 INCHES YREF = 1.1100 INCHES  
 BREF = 39.8490 INCHES ZREF = 1.1100 INCHES  
 SCALE = 103100 SCALE

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 ALPHAT( 1 ) = -9.400

DEPENDENT VARIABLE CP

X/LNF	.250	.500	.750
PHI			
.100	-.2330	-.2340	
90.100	-.2370	-.2350	-.2330
135.100	-.2550	-.2460	-.2470
180.100	.0690	-.0350	-.2440
225.100	-.2610	-.2450	-.2430
270.100	-.2340	-.2340	-.2310

MACH ( 1 ) = 1.555 ALPHAT( 2 ) = -6.330

X/LNF	.250	.500	.750
PHI			
.100	-.2320	-.2330	
90.100	-.2360	-.2340	-.2300
135.100	-.2480	-.2450	-.2320
180.100	.0260	-.0590	-.2440
225.100	-.2570	-.2430	-.2410
270.100	-.2330	-.2330	-.2290

MACH ( 1 ) = 1.555 ALPHAT( 3 ) = -4.290

X/LNF	.250	.500	.750
PHI			
.100	-.2270	-.2290	
90.100	-.2330	-.2310	-.2310
135.100	-.2420	-.2430	-.2290
180.100	-.0120	-.0860	-.2410
225.100	-.2480	-.2380	-.2330
270.100	-.2320	-.2290	-.2260

MACH ( 1 ) = 1.555 ALPHAT( 4 ) = -2.190

X/LNF	.250	.500	.750
PHI			
.100	-.2310	-.2310	
90.100	-.2340	-.2330	-.2320
135.100	-.2430	-.2460	-.2330
180.100	-.1010	-.1080	-.2410
225.100	-.2490	-.2420	-.2360
270.100	-.2340	-.2320	-.2310

MACH ( 1 ) = 1.555 ALPHAT( 5 ) = -.120

X/LNF	.250	.500	.750
PHI			
.100	-.2330	-.2330	
90.100	-.2380	-.2390	-.2340
135.100	-.2440	-.2490	-.2360
180.100	-.0620	-.1220	-.2440
225.100	-.2520	-.2450	-.2380

PARAMETRIC DATA

BETAT = .000 ORBINC = .500  
 RUDDER = .000 ELEWON = .000  
 RUOFLR = .000

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B

(R00001)

AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 ALPHAT( 5 ) = -.120  
X/LNF .250 .500 .750  
PHI 270.000 -.2368 -.2350 -.2340

MACH ( 1 ) = 1.555 ALPHAT( 6 ) = 1.950  
X/LNF .250 .500 .750  
PHI .000 -.2270 -.2260  
90.000 1.2310 -.2290 -.2300  
135.000 1.2320 -.2440 -.2290  
180.000 1.0780 -.1500 -.2340  
225.000 -.2400 -.2400 -.2310  
270.000 -.2320 -.2290 -.2270

MACH ( 1 ) = 1.555 ALPHAT( 7 ) = 4.010  
X/LNF .250 .500 .750  
PHI .000 -.2250 -.2250  
90.000 -.2290 -.2280 -.2280  
135.000 -.2270 -.2350 -.2290  
180.000 1.0860 -.1820 -.2280  
225.000 -.2370 -.2350 -.2280  
270.000 -.2300 -.2270 -.2250

MACH ( 1 ) = 1.555 ALPHAT( 8 ) = 5.060  
X/LNF .250 .500 .750  
PHI .000 -.2280 -.2290  
90.000 -.2340 -.2310 -.2310  
135.000 -.2320 -.2390 -.2340  
180.000 -.0910 -.2120 -.2340  
225.000 -.2360 -.2350 -.2340  
270.000 -.2350 -.2320 -.2270

MACH ( 1 ) = 1.555 ALPHAT( 9 ) = 6.130  
X/LNF .250 .500 .750  
PHI .000 -.2270 -.2280  
90.000 -.2330 -.2310 -.2290  
135.000 -.2310 -.2350 -.2340  
180.000 -.1080 -.2240 -.2290  
225.000 -.2350 -.2340 -.2290  
270.000 -.2340 -.2340 -.2260

MACH ( 2 ) = 2.000 ALPHAT( 1 ) = -8.360  
X/LNF .250 .500 .750  
PHI .000 -.1540 -.1550  
90.000 -.1560 -.1540 -.1550  
135.000 -.2210 -.1610 -.1730  
180.000 .1570 .0460 -.1610  
225.000 -.1990 -.1690 -.1670



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TABULATED PRESSURE DATA - 1A98

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AVES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RBO001)

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 ALPHAT( 1 ) = -0.360

X/LNP	.250	.500	.750
PHI			
270.000	-.1550	-.1560	-.1520

MACH ( 2 ) = 2.000 ALPHAT( 2 ) = -0.310

X/LNP	.250	.500	.750
PHI			
90.000	-.1620	-.1630	
90.000	-.1650	-.1630	-.1630
135.000	-.2220	-.1690	-.1800
180.000	.1230	.0300	-.1680
225.000	-.1980	-.1760	-.1730
270.000	-.1630	-.1630	-.1590

MACH ( 2 ) = 2.000 ALPHAT( 3 ) = -0.250

X/LNP	.250	.500	.750
PHI			
90.000	-.1680	-.1670	
90.000	-.1680	-.1670	-.1690
135.000	-.2210	-.1760	-.1830
180.000	.0840	.0110	-.1740
225.000	-.1980	-.1800	-.1770
270.000	-.1690	-.1680	-.1650

MACH ( 2 ) = 2.000 ALPHAT( 4 ) = -0.210

X/LNP	.250	.500	.750
PHI			
90.000	-.1720	-.1730	
90.000	-.1750	-.1740	-.1750
135.000	-.2210	-.1820	-.1940
180.000	.0650	.0460	-.1800
225.000	-.2030	-.1890	-.1810
270.000	-.1750	-.1730	-.1740

MACH ( 2 ) = 2.000 ALPHAT( 5 ) = -0.160

X/LNP	.250	.500	.750
PHI			
90.000	-.1750	-.1760	
90.000	-.1770	-.1760	-.1760
135.000	-.2170	-.1870	-.1920
180.000	.0480	.0410	-.1840
225.000	-.2020	-.1920	-.1830
270.000	-.1790	-.1760	-.1730

MACH ( 2 ) = 2.000 ALPHAT( 6 ) = 0.090

X/LNP	.250	.500	.750
PHI			
90.000	-.1780	-.1790	
90.000	-.1800	-.1790	-.1780
135.000	-.2090	-.1870	-.1930
180.000	.0300	-.0040	-.1910
225.000	-.2030	-.1960	-.1910

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A88  
AMES 97-707 1A9 Q2A + S3 + T9 UPPER MPS NOZZLE

(R50011)

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.5000 ALPHAT ( 6 ) = 1.890  
X/LNP .250 .500 .750  
PHI  
270.000 -.1810 -.1780 -.1760

MACH ( 2 ) = 2.5000 ALPHAT ( 7 ) = 3.930  
X/LNP .250 .500 .750  
PHI  
.000 -.1780 -.1810  
90.000 -.1830 -.1810 -.1840  
135.000 -.1970 -.1890 -.1920  
180.000 .0220 -.0330 -.0940  
225.000 -.2030 -.1960 -.1860  
270.000 -.1830 -.1820 -.1780

MACH ( 2 ) = 2.5000 ALPHAT ( 8 ) = 5.980  
X/LNF .250 .500 .750  
PHI  
.000 -.1790 -.1820  
90.000 -.1830 -.1820 -.1830  
135.000 -.1930 -.1850 -.1920  
180.000 -.1430 -.0750 -.1920  
225.000 -.2060 -.1990 -.1860  
270.000 -.1840 -.1840 -.1840

MACH ( 2 ) = 2.5000 ALPHAT ( 9 ) = 8.020  
X/LNF .250 .500 .750  
PHI  
.000 -.1850 -.1850  
90.000 -.1860 -.1860 -.1850  
135.000 -.1980 -.1850 -.1940  
180.000 -.1250 -.0940 -.1950  
225.000 -.2090 -.2010 -.1890  
270.000 -.1860 -.1870 -.1830

DATE 21 SEP 73

INSULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 06A + S3 + T9 UPPER MPS NOZZLE

(RBC002) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQUARE INCHES  
LREF = 39.8490 INCHES  
BREF = 39.8490 INCHES  
SCALE = 0.0001 SCALE

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.140

DEPENDENT VARIABLE CP

X/LNF	.250	.500	.750
PHI			
.000	-.2550	-.2590	
90.000	-.2630	-.2620	-.2630
135.000	-.2680	-.2660	-.2630
180.000	-.2710	-.2640	-.2640
225.000	-.2710	-.2640	-.2630
270.000	-.2670	-.2640	-.2630

MACH ( 2 ) = 1.555 BETAT ( 2 ) = -5.100

X/LNF	.250	.500	.750
PHI			
.000	-.2420	-.2460	
90.000	-.2500	-.2470	-.2460
135.000	-.2580	-.2450	-.2450
180.000	-.2610	-.2450	-.2450
225.000	-.2520	-.2450	-.2450
270.000	-.2520	-.2450	-.2450

MACH ( 3 ) = 1.555 BETAT ( 3 ) = -3.050

X/LNF	.250	.500	.750
PHI			
.000	-.2380	-.2410	
90.000	-.2470	-.2420	-.2390
135.000	-.2560	-.2470	-.2400
180.000	-.2580	-.2460	-.2400
225.000	-.2570	-.2460	-.2410
270.000	-.2450	-.2420	-.2390

MACH ( 4 ) = 1.555 BETAT ( 4 ) = 5.110

X/LNF	.250	.500	.750
PHI			
.000	-.2460	-.2470	
90.000	-.2550	-.2520	-.2520
135.000	-.2680	-.2640	-.2520
180.000	-.2770	-.2580	-.2550
225.000	-.2770	-.2580	-.2550
270.000	-.2500	-.2470	-.2470

MACH ( 5 ) = 1.555 BETAT ( 5 ) = 7.140

X/LNF	.250	.500	.750
PHI			
.000	-.2560	-.2580	
90.000	-.2670	-.2630	-.2620
135.000	-.2840	-.2670	-.2610
180.000	-.2810	-.2650	-.2700
225.000	-.2690	-.2630	-.2630

PARAMETRIC DATA

ALPHAT = 8.0000 ORBINC = .5000  
RUDDER = .0000 ELEVON = .0000  
RUFLR = .0000

DATE 21 SEP 75

TABULATED PRESSURE DATA - 1A98

(RBOOM/2)

AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

DEPENDENT VARIABLE C<sup>2</sup>

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.140

X/LNP .250 .500 .750  
PHI 270.000 -.2600 -.2580 -.2560

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.190

X/LNP .250 .500 .750  
PHI .000 -.2600 -.2610

90.000 -.2780 -.2710 -.2690  
135.000 -.2880 -.2720 -.2710

180.000 -.1800 -.1340 -.2710  
225.000 -.2990 -.2720 -.2740

270.000 -.2670 -.2670 -.2680

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.320

X/LNP .250 .500 .750  
PHI .000 -.1800 -.1810

90.000 -.1940 -.1890 -.1840  
135.000 -.1930 -.1840 -.1880

180.000 -.1490 -.1840 -.1960  
225.000 -.2030 -.1930 -.1890

270.000 -.1890 -.1840 -.1810

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.270

X/LNP .250 .500 .750  
PHI .000 -.1860 -.1860

90.000 -.1960 -.1890 -.1880  
135.000 -.2030 -.1820 -.1910

180.000 -.1140 -.1060 -.1980  
225.000 -.2020 -.2040 -.1890

270.000 -.1890 -.1870 -.1890

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210

X/LNP .250 .500 .750  
PHI .000 -.1670 -.1880

90.000 -.1930 -.1890 -.1940  
135.000 -.1990 -.1970 -.1940

180.000 -.1660 -.1070 -.2040  
225.000 -.2030 -.2010 -.1930

270.000 -.1910 -.1940 -.1850

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.990

X/LNP .250 .500 .750  
PHI .000 -.1930 -.1940

90.000 -.1990 -.1970 -.1970  
135.000 -.2180 -.2090 -.2000

180.000 -.1930 -.1530 -.2140  
225.000 -.2240 -.2070 -.2030

270.000 -.2240 -.2070 -.2030

DATE 21 SEP 73  
 CALCULATED PRESSURE DATA - 1A98  
 ANES 97-757 1A9 CEA + S3 + T9 UPPER MPS NOZZLE  
 (RBC002)

SECTION ( 1 ) MPS NOZZLE  
 DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.1000 BETAT ( 4 ) = 3.990  
 PHI  
 270.000 -.2010 -.1970 -.1920

MACH ( 2 ) = 2.1000 BETAT ( 5 ) = 5.000  
 PHI  
 .000 -.1870 -.1890  
 90.000 -.1930 -.1920 -.1930  
 135.000 -.2070 -.2040 -.1930  
 180.000 -.1380 .0010 -.2020  
 225.000 -.2230 -.1860 -.1940  
 270.000 -.1990 -.1920 -.1850

MACH ( 2 ) = 2.1000 BETAT ( 6 ) = 8.120  
 PHI  
 .000 -.1930 -.1940  
 90.000 -.2000 -.2000 -.2000  
 135.000 -.2090 -.2010 -.2010  
 180.000 -.1890 -.1130 -.2090  
 225.000 -.2240 -.1950 -.2020  
 270.000 -.2050 -.1970 -.1940

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RBD003) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0000 SCALE

PARAMETRIC DATA

ALPHAT = 6.0000 ORBINC = .5000  
RUDDER = .0000 ELEVON = .0000  
RUDDLR = .0000

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.120  
X/LNP .250 .500 .750  
PHI  
.0000  
90.0000 -.2570  
135.0000 -.2660  
180.0000 -.2680  
225.0000 -.2610  
270.0000 -.2610

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070

X/LNP .250 .500 .750  
PHI  
.0000  
90.0000 -.2430  
135.0000 -.2430  
180.0000 -.2620  
225.0000 -.1610  
270.0000 -.2540

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.020

X/LNP .250 .500 .750  
PHI  
.0000  
90.0000 -.2360  
135.0000 -.2380  
180.0000 -.2440  
225.0000 -.2360  
270.0000 -.2360

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.000

X/LNP .250 .500 .750  
PHI  
.0000  
90.0000 -.2430  
135.0000 -.2460  
180.0000 -.2590  
225.0000 -.1650  
270.0000 -.2470

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.110

X/LNP .250 .500 .750  
PHI  
.0000  
90.0000 -.2540  
135.0000 -.2620  
180.0000 -.2690  
225.0000 -.1200  
270.0000 -.2690

(RBO003)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A98  
 AMES 97-757 1A9 02A + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE      DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555    BETAT ( 5 ) = 7.110  
 X/LNF    PHI    .250    .500    .750  
 270.000    -.2530    -.2520    -.2510

MACH ( 1 ) = 1.555    BETAT ( 6 ) = 9.140  
 X/LNF    PHI    .250    .500    .750  
 .000    -.2560    -.2580    -.2600    -.2670  
 90.000    -.2740    -.2680    -.2630    -.2630  
 135.000    -.2860    -.2700    -.2630    -.2630  
 180.000    -.1390    -.1920    -.2660    -.2660  
 225.000    -.2920    -.2730    -.2680    -.2680  
 270.000    -.2600    -.2590    -.2570    -.2570

MACH ( 2 ) = 2.000    BETAT ( 1 ) = -9.500  
 X/LNF    PHI    .250    .500    .750  
 .000    -.1810    -.1820    -.1860    -.1860  
 90.000    -.1920    -.1860    -.1890    -.1890  
 135.000    -.1950    -.1840    -.1890    -.1890  
 180.000    -.1290    -.1660    -.1970    -.1970  
 225.000    -.2140    -.1960    -.1830    -.1830  
 270.000    -.1870    -.1850    -.1820    -.1820

MACH ( 2 ) = 2.000    BETAT ( 2 ) = -6.250  
 X/LNF    PHI    .250    .500    .750  
 .000    -.1820    -.1830    -.1880    -.1880  
 90.000    -.1940    -.1880    -.1890    -.1890  
 135.000    -.2130    -.1890    -.1890    -.1890  
 180.000    -.1160    -.1450    -.1970    -.1970  
 225.000    -.2120    -.1980    -.1880    -.1880  
 270.000    -.1480    -.1870    -.1830    -.1830

MACH ( 2 ) = 2.000    BETAT ( 3 ) = -4.200  
 X/LNF    PHI    .250    .500    .750  
 .000    -.1860    -.1870    -.1880    -.1880  
 90.000    -.1890    -.1880    -.1880    -.1880  
 135.000    -.2240    -.2110    -.1940    -.1940  
 180.000    -.1450    -.1550    -.2010    -.2010  
 225.000    -.2190    -.1990    -.1950    -.1950  
 270.000    -.1910    -.1890    -.1860    -.1860

MACH ( 2 ) = 2.000    BETAT ( 4 ) = 3.900  
 X/LNF    PHI    .250    .500    .750  
 .000    -.1910    -.1920    -.1950    -.1950  
 90.000    -.1970    -.1940    -.1940    -.1940  
 135.000    -.2100    -.2120    -.1980    -.1980  
 180.000    -.1430    -.1430    -.2050    -.2050  
 225.000    -.2180    -.2180    -.2050    -.2050  
 270.000    -.1880    -.1880    -.2050    -.2050

AMES 97-707 1A9 CEA + S3 + T9 UPPER MPS NOZZLE

(RBD003)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.1444 CETA\* ( 4 ) = 3.970

X/LNP	.250	.500	.750
PHI			
270.000	-.1960	-.1930	-.1900

MACH ( 2 ) = 2.1444 BETAT ( 5 ) = 6.030

X/LNP	.250	.500	.750
PHI			
.000	-.1870	-.1890	
90.000	-.1920	-.1910	-.1930
135.000	-.2080	-.2060	-.1940
180.000	-.1230	.0020	-.2030
225.000	-.2290	-.1890	-.2010
270.000	-.1950	-.1910	-.1850

MACH ( 2 ) = 2.1444 BETAT\* ( 6 ) = 5.100

X/LNP	.250	.500	.750
PHI			
.000	-.1990	-.1930	
90.000	-.1990	-.1970	-.1980
135.000	-.2110	-.2100	-.1990
180.000	-.1460	-.0210	-.2090
225.000	-.2240	-.1980	-.2050
270.000	-.2020	-.1970	-.1900



DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-717 1A9 CEA + S3 + T9 UPPER MPS NOZZLE

(RBOCU4) ( 24 MAY 73 )

## PARAMETRIC DATA

ALPHAT = 4.140 ORBINC = .510  
 RUDDER = .140 ELEVON = .100  
 RUDDLR = .160

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 28.5300 INCHES  
 LREF = 39.8490 INCHES YREF = .14200 INCHES  
 BREF = 39.8490 INCHES ZREF = .14200 INCHES  
 SCALE = .13140 SCALE

## DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.080  
 X/LNP .250 .500 .750  
 PHI  
 .000 -.2470 -.2490  
 90.000 -.2510 -.2490 -.2520  
 135.000 -.2720 -.2530  
 180.000 -.1170 -.1910 -.2620  
 225.000 -.2730 -.2680 -.2540  
 270.000 -.2550 -.2520 -.2510

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070

X/LNP .250 .500 .750  
 PHI  
 .000 -.2400 -.2410  
 90.000 -.2440 -.2410 -.2420  
 135.000 -.2710 -.2590 -.2420  
 180.000 -.1090 -.1610 -.2520  
 225.000 -.2620 -.2590 -.2460  
 270.000 -.2460 -.2430 -.2430

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.040

X/LNP .250 .500 .750  
 PHI  
 .000 -.2360 -.2380  
 90.000 -.2410 -.2380 -.2380  
 135.000 -.2550 -.2480 -.2380  
 180.000 -.1080 -.1220 -.2380  
 225.000 -.2530 -.2490 -.2410  
 270.000 -.2430 -.2410 -.2390

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.080

X/LNP .250 .500 .750  
 PHI  
 .000 -.2410 -.2410  
 90.000 -.2490 -.2470 -.2460  
 135.000 -.2670 -.2630 -.2480  
 180.000 -.1040 -.1150 -.2480  
 225.000 -.2780 -.2640 -.2450  
 270.000 -.2420 -.2410 -.2390

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.080

X/LNP .250 .500 .750  
 PHI  
 .000 -.2480 -.2490  
 90.000 -.2560 -.2540 -.2550  
 135.000 -.2750 -.2690 -.2550  
 180.000 -.1080 -.1070 -.2650  
 225.000 -.2910 -.2710 -.2540

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98 (RBC0014)

AMES 97-707 1A9 Q2A + S3 + T9 UPPER MPS NOZZLE

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.1480  
X/LNF .250 .500 .750  
PHI 270.000 - .2490 - .2470 - .2460

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.1100  
X/LNF .250 .500 .750  
PHI .000 - .2530 - .2550  
90.000 - .2730 - .2660 - .2630  
135.000 - .2820 - .2710 - .2640  
180.000 - .1130 - .0610 - .2660  
225.000 - .3010 - .2790 - .2640  
270.000 - .2560 - .2520 - .2520

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -9.270  
X/LNF .250 .500 .750  
PHI .000 - .1780 - .1790  
90.000 - .1890 - .1830 - .1840  
135.000 - .1890 - .1820 - .1880  
180.000 - .1210 - .1280 - .1960  
225.000 - .2140 - .1910 - .1830  
270.000 - .1860 - .1830 - .1800

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -9.240  
X/LNF .250 .500 .750  
PHI .000 - .1820 - .1840  
90.000 - .1860 - .1840 - .1890  
135.000 - .2170 - .1940 - .1890  
180.000 - .1940 - .1420 - .1980  
225.000 - .2170 - .2110 - .1880  
270.000 - .1890 - .1860 - .1830

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200  
X/LNF .250 .500 .750  
PHI .000 - .1840 - .1890  
90.000 - .1880 - .1860 - .1860  
135.000 - .2280 - .2110 - .1910  
180.000 - .1140 - .1030 - .2000  
225.000 - .2110 - .1950 - .1960  
270.000 - .1890 - .1880 - .1840

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.950  
X/LNF .250 .500 .750  
PHI .000 - .1860 - .1880  
90.000 - .1940 - .1910 - .1920  
135.000 - .2220 - .1960 - .1950  
180.000 - .1010 - .1050 - .2020  
225.000 - .2320 - .2120 - .1960

DATE 21 SEP 73

ABULATED PRESSURE DATA - 1A98  
AMES 97-757 1A9 OCA + S3 + T9 UPPER MPS NOZZLE

(RBOC:14)

SECTION ( 3 ) MPS NOZZLE  
DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.950  
X/LNF .250 .500 .750  
PHI  
270.000 -.1920 -.1900 -.1840

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.990  
X/LNF .250 .500 .750  
PHI  
.000 -.1860 -.1870  
90.000 -.1890 -.1890 -.1900  
135.000 -.2060 -.2040 -.1920  
180.000 -.1880 .0260 -.2010  
225.000 -.2290 -.1890 -.1980  
270.000 -.1910 -.1870 -.1820

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.030  
X/LNF .250 .500 .750  
PHI  
.000 -.1940 -.1910  
90.000 -.1990 -.1960 -.1960  
135.000 -.2140 -.2070 -.1970  
180.000 -.1840 -.0350 -.2090  
225.000 -.2150 -.2010 -.2060  
270.000 -.2030 -.1960 -.1870

(RBOCUS) ( 24 MAY 73 )

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1498  
AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

PARAMETRIC DATA

ALPHAT = 2.122 ORBINC = .500  
RUDDER = .000 ELEVON = .000  
RUOFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .03125 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE  
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.112  
X/LNP .250 .500 .750  
PHI .000 -2450 -2460 -2490  
90.000 -2470 -2450 -2490  
135.000 -2860 -2710 -2490  
180.000 -1840 -1690 -2670  
225.000 -2740 -2650 -2530  
270.000 -2520 -2500 -2500

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070

X/LNP .250 .500 .750  
PHI .000 -2400 -2410 -2430  
90.000 -2410 -2410 -2430  
135.000 -2730 -2570 -2450  
180.000 -1630 -1370 -2540  
225.000 -2620 -2640 -2470  
270.000 -2470 -2450 -2430

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050

X/LNP .250 .500 .750  
PHI .000 -2330 -2360 -2350  
90.000 -2380 -2350 -2350  
135.000 -2530 -2440 -2360  
180.000 -1840 -1950 -2370  
225.000 -2540 -2450 -2380  
270.000 -2410 -2380 -2370

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.090

X/LNP .250 .500 .750  
PHI .000 -2390 -2390 -2390  
90.000 -2460 -2430 -2450  
135.000 -2670 -2610 -2450  
180.000 -1820 -1660 -2530  
225.000 -2790 -2590 -2440  
270.000 -2410 -2370 -2360

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.070

X/LNP .250 .500 .750  
PHI .000 -2410 -2420 -2490  
90.000 -2500 -2480 -2490  
135.000 -2730 -2630 -2490  
180.000 -1920 -1860 -2530  
225.000 -2860 -2640 -2470

AMES 97-7J7 1A9 ORA + S3 + T9 UPPER MPS NOZZLE

(RBOOUS)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.57J

X/LNF	.25J	.50J	.75J
PHI			
270.000	-.2420	-.2390	-.2380

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.59J

X/LNF	.25J	.50J	.75J
PHI			
.000	-.2540	-.2550	
90.000	-.2660	-.2610	-.2650
135.000	-.2800	-.2730	-.2610
180.000	-.0690	-.0050	-.2750
225.000	-.3560	-.2820	-.2570
270.000	-.2550	-.2460	-.2450

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.280

X/LNF	.25J	.50J	.75J
PHI			
.000	-.1730	-.1750	
90.000	-.1800	-.1780	-.1800
135.000	-.1990	-.1820	-.1830
180.000	-.0950	.0140	-.1910
225.000	-.1970	-.1840	-.1790
270.000	-.1840	-.1800	-.1760

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250

X/LNF	.25J	.50J	.75J
PHI			
.000	-.1760	-.1780	
90.000	-.1800	-.1770	-.1770
135.000	-.2100	-.1870	-.1830
180.000	-.0560	.0170	-.1910
225.000	-.2050	-.1950	-.1810
270.000	-.1830	-.1800	-.1780

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.140

X/LNF	.25J	.50J	.75J
PHI			
.000	-.1790	-.1810	
90.000	-.1830	-.1810	-.1810
135.000	-.2100	-.1900	-.1850
180.000	-.0020	-.0080	-.1960
225.000	-.2060	-.1960	-.1880
270.000	-.1850	-.1830	-.1800

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.940

X/LNF	.25J	.50J	.75J
PHI			
.000	-.1870	-.1880	
90.000	-.1940	-.1910	-.1900
135.000	-.2260	-.1950	-.1950
180.000	-.0080	.0070	-.2030
225.000	-.2220	-.2000	-.1990

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 CSA + S3 + T9 UPPER MPS NOZZLE

(R80003)

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.940	X/LNP	.250	.500	.750
		PHI			
		270.000	-.1920	-.1880	-.1840
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.980	X/LNP	.250	.500	.750
		PHI			
		.000	-.1810	-.1820	
		90.000	-.1870	-.1850	-.1860
		135.000	-.2090	-.2030	-.1880
		180.000	-.0680	.0530	-.2110
		225.000	-.2240	-.1870	-.1980
		270.000	-.1880	-.1840	-.1790
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 9.020	X/LNP	.250	.500	.750
		PHI			
		.000	-.1830	-.1850	
		90.000	-.1940	-.1920	-.1910
		135.000	-.2100	-.1960	-.1920
		180.000	-.0250	-.0710	-.2050
		225.000	-.2160	-.1950	-.2140
		270.000	-.1940	-.1920	-.1830

AMES 97-707 1A9 OEA + S3 + T9 UPPER NP5 NOZZLE

(RB0006) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0310 SCALE

## PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUOFLR = .000

## SECTION ( 1 ) NP5 NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.100

X/LNP	.250	.500	.750
PHI			
.000	-.2360	-.2380	
90.000	-.2390	-.2380	-.2410
135.000	-.2810	-.2560	-.2410
180.000	-.0510	-.0740	-.2540
225.000	-.2630	-.2630	-.2440
270.000	-.2440	-.2410	-.2410

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.080

X/LNP	.250	.500	.750
PHI			
.000	-.2370	-.2390	
90.000	-.2360	-.2360	-.2380
135.000	-.2680	-.2490	-.2390
180.000	-.0740	-.0920	-.2510
225.000	-.2590	-.2560	-.2420
270.000	-.2440	-.2410	-.2410

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.060

X/LNP	.250	.500	.750
PHI			
.000	-.2360	-.2380	
90.000	-.2380	-.2370	-.2380
135.000	-.2610	-.2450	-.2380
180.000	-.0720	-.1460	-.2430
225.000	-.2570	-.2510	-.2420
270.000	-.2430	-.2410	-.2390

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.050

X/LNP	.250	.500	.750
PHI			
.000	-.2350	-.2350	
90.000	-.2450	-.2410	-.2430
135.000	-.2590	-.2630	-.2430
180.000	-.1460	-.1460	-.2540
225.000	-.2810	-.2540	-.2450
270.000	-.2360	-.2340	-.2330

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.080

X/LNP	.250	.500	.750
PHI			
.000	-.2350	-.2380	
90.000	-.2460	-.2430	-.2450
135.000	-.2650	-.2630	-.2440
180.000	-.0770	-.0120	-.2570
225.000	-.2660	-.2570	-.2440

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 ANES 97-707 1A9 O2A + S3 + T9 UPPER MP5 NOZZLE (RBOC:6)

SECTION ( 1 ) MP5 NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.060  
 X/LNF .250 .500 .750  
 PHI  
 270.000 -.2380 -.2350 -.2330

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.080  
 X/LNF .250 .500 .750  
 PHI  
 1000 -.2440 -.2460  
 90.000 -.2580 -.2540 -.2520  
 135.000 -.2700 -.2690 -.2530  
 180.000 -.0530 .0110 -.2660  
 225.000 -.2970 -.2720 -.2510  
 270.000 -.2470 -.2400 -.2370

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.290  
 X/LNF .250 .500 .750  
 PHI  
 1000 -.1700 -.1710  
 90.000 -.1740 -.1720 -.1740  
 135.000 -.1980 -.1840 -.1780  
 180.000 -.0730 .0460 -.1890  
 225.000 -.1910 -.1870 -.1740  
 270.000 -.1780 -.1750 -.1710

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250  
 X/LNF .250 .500 .750  
 PHI  
 1000 -.1740 -.1760  
 90.000 -.1800 -.1750 -.1740  
 135.000 -.1930 -.1810 -.1800  
 180.000 -.0370 .0310 -.1910  
 225.000 -.2050 -.1990 -.1790  
 270.000 -.1820 -.1800 -.1750

MACH ( 2 ) = 2.000 BETAT ( 3 ) = 7.130  
 X/LNF .250 .500 .750  
 PHI  
 1000 -.1730 -.1750  
 90.000 -.1800 -.1780 -.1770  
 135.000 -.2150 -.1870 -.1920  
 180.000 .0280 .0040 -.1880  
 225.000 -.2070 -.1940 -.1820  
 270.000 -.1790 -.1770 -.1730

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.990  
 X/LNF .250 .500 .750  
 PHI  
 1000 -.1810 -.1820  
 90.000 -.1860 -.1820 -.1820  
 135.000 -.2190 -.1900 -.1920  
 180.000 -.0180 .0350 -.1960  
 225.000 -.2140 -.1970 -.1910



AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

SECTION : 11MPS NOZZLE

MACH ( 2 ) =	2.000	BETAT ( 4 ) =	3.950	X/LINE	.250	.500	.750
				PHI			
				270.000	-.1800	-.1810	-.1760

MACH	( 2 ) = 2.000	BETAT ( 5 ) = 5.980	X/LMP	.250	.500	.750
PHI						
			.000	-.1770	-.1780	
			94.000	-.1820	-.1800	-.1810
			135.000	-.2040	-.2010	-.1820
			184.000	-.0510	.0970	-.1950
			225.000	-.2140	-.1820	-.1940
			270.000	-.1830	-.1780	-.1730

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBC007) ( 24 MAY 73 )

ANES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

PARAMETRIC DATA

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.3300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

ALPHA\* = -2.1000 ORBINC = .5000  
 RUDDER = .1000 ELEVON = .1000  
 RUDDLE = .1000

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.110  
 X/LNP .250 .500 .750  
 PHI  
 .100 -2330 -2340  
 90.100 -2350 -2360 -2380  
 135.100 -2730 -2480 -2370  
 180.100 -10790 -10340 -2540  
 225.100 -2660 -2620 -2400  
 270.100 -2430 -2410 -2380

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.090

X/LNF .250 .500 .750  
 PHI  
 .100 -2330 -2320  
 90.100 -2340 -2350  
 135.100 -2720 -2460 -2450  
 180.100 -10650 -10920 -2480  
 225.100 -2580 -2560 -2360  
 270.100 -2390 -2360 -2350

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.070

X/LNP .250 .500 .750  
 PHI  
 .100 -2310 -2330  
 90.100 -2310 -2330 -2340  
 135.100 -2610 -2400 -2330  
 180.100 -10620 -11230 -2430  
 225.100 -2530 -2470 -2370  
 270.100 -2390 -2360 -2350

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.040

X/LNF .250 .500 .750  
 PHI  
 .100 -2270 -2270  
 90.100 -2380 -2330 -2330  
 135.100 -2510 -2590 -2360  
 180.100 -10820 -10070 -2480  
 225.100 -2780 -2460 -2400  
 270.100 -2290 -2280 -2270

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.060

X/LNF .250 .500 .750  
 PHI  
 .100 -2270 -2280  
 90.100 -2400 -2370 -2370  
 135.100 -2690 -2620 -2370  
 180.100 -10620 -10290 -2520  
 225.100 -2780 -2470 -2460

DATE 21 SEP 75  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-7.7 1A9 O2A + S3 + T9 UPPER MPS NOZZLE (RSCON17)

SECTION ( 1 ) MPS NOZZLE  
 DEPENDENT VARIABLE CF

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.060  
 X/LNP .250 .500 .750  
 PM1  
 270.140 -0.2320 -0.2280 -0.2260

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.140  
 X/LNP .250 .500 .750  
 PM1  
 .140 -0.2290 -0.2310  
 90.140 -0.2410 -0.2370 -0.2390  
 135.140 -0.2570 -0.2590 -0.2580  
 180.140 -0.3390 -0.3410 -0.3520  
 225.140 -0.2940 -0.2540 -0.2380  
 270.140 -0.2330 -0.2260 -0.2220

MACH ( 2 ) = 2.100 BETAT ( 1 ) = -0.310  
 X/LNP .250 .500 .750  
 PM1  
 .020 -0.1650 -0.1680  
 90.140 -0.1700 -0.1650 -0.1670  
 135.140 -0.1680 -0.1650 -0.1720  
 180.140 -0.0340 -0.1160 -0.1860  
 225.140 -0.1920 -0.1940 -0.1710  
 270.140 -0.1730 -0.1740 -0.1670

MACH ( 2 ) = 2.100 BETAT ( 2 ) = -0.260  
 X/LNP .250 .500 .750  
 PM1  
 .140 -0.1720 -0.1750  
 90.140 -0.1790 -0.1730 -0.1710  
 135.140 -0.1760 -0.1750 -0.1780  
 180.140 -0.1020 -0.1010 -0.1800  
 225.140 -0.2060 -0.1950 -0.1790  
 270.140 -0.1820 -0.1770 -0.1730

MACH ( 2 ) = 2.100 BETAT ( 3 ) = -0.230  
 X/LNP .250 .500 .750  
 PM1  
 .140 -0.1770 -0.1790  
 90.140 -0.1810 -0.1780 -0.1770  
 135.140 -0.2020 -0.1860 -0.1830  
 180.140 -0.0640 -0.0360 -0.1910  
 225.140 -0.2080 -0.1890 -0.1930  
 270.140 -0.1820 -0.1810 -0.1770

MACH ( 2 ) = 2.100 BETAT ( 4 ) = 3.900  
 X/LNP .250 .500 .750  
 PM1  
 .140 -0.1760 -0.1790  
 90.140 -0.1850 -0.1810 -0.1840  
 135.140 -0.2220 -0.1910 -0.1920  
 180.140 -0.0460 -0.0330 -0.1920  
 225.140 -0.2160 -0.1940 -0.1900

(RBC07)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
ANES 97-707 1A9 OEA + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.940	X/LNP	.250	.500 .750
	PHI		
	270.000	-.1840	-.1830 -.1730
	X/LNP	.250	.500 .750
	PHI		
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.970	.000	-.1720	-.1760
	90.000	-.1810	-.1770
	135.000	-.2110	-.1980
	180.000	-.1430	-.1670
	225.000	-.1980	-.1930
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.010	270.000	-.1830	-.1750
	X/LNP	.250	.500 .750
	PHI		
	.000	-.1730	-.1780
	90.000	-.1800	-.1780
	135.000	-.2010	-.2040
	180.000	.1060	.1330
	225.000	-.1840	-.1890
	270.000	-.1820	-.1750

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = 10.0000 INCHES  
 BRP = 39.8490 INCHES ZMRP = 10.0000 INCHES  
 SCALE = 0.0300 SCALE

PARAMETRIC DATA

ALPHAT = -4.0000 ORBINC = 0.5000  
 RUDDER = 0.0000 ELEVON = 0.0000  
 RUOFLR = 0.0000

DEPENDENT VARIABLE CP

SECTION ( 1 ) NPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.130  
 X/LNP .250 .500 .750  
 PHI  
 0.000 -0.2260 -0.2270 -0.2280  
 90.000 -0.2270 -0.2280 -0.2290  
 135.000 -0.2360 -0.2380 -0.2400  
 180.000 -0.1180 -0.1170 -0.2450  
 225.000 -0.2670 -0.2490 -0.2320  
 270.000 -0.2380 -0.2340 -0.2310

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.190

X/LNP .250 .500 .750  
 PHI  
 0.000 -0.2240 -0.2230 -0.2250  
 90.000 -0.2250 -0.2230 -0.2250  
 135.000 -0.2740 -0.2350 -0.2410  
 180.000 -0.1670 -0.1720 -0.2400  
 225.000 -0.2550 -0.2450 -0.2280  
 270.000 -0.2330 -0.2290 -0.2270

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.070

X/LNP .250 .500 .750  
 PHI  
 0.000 -0.2280 -0.2280 -0.2310  
 90.000 -0.2310 -0.2310 -0.2310  
 135.000 -0.2590 -0.2360 -0.2410  
 180.000 -0.1050 -0.1070 -0.2400  
 225.000 -0.2490 -0.2460 -0.2330  
 270.000 -0.2340 -0.2310 -0.2310

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.030

X/LNP .250 .500 .750  
 PHI  
 0.000 -0.2210 -0.2210 -0.2270  
 90.000 -0.2310 -0.2280 -0.2270  
 135.000 -0.2470 -0.2510 -0.2280  
 180.000 -0.1030 -0.1130 -0.2110  
 225.000 -0.2760 -0.2420 -0.2030  
 270.000 -0.2240 -0.2220 -0.2220

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.050

X/LNP .250 .500 .750  
 PHI  
 0.000 -0.2220 -0.2220 -0.2290  
 90.000 -0.2340 -0.2310 -0.2290  
 135.000 -0.2680 -0.2500 -0.2290  
 180.000 -0.1090 -0.1020 -0.2450  
 225.000 -0.2780 -0.2410 -0.2430

(RBC0006)

AMES 97-737 1A9 OEA \* S3 \* T9 UPPER MPS NOZZLE

## SECTION / 1) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.050

X/LNP PHI	.250	.500	.750
270.000	-.2270	-.2230	-.2210

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.070

X/LNP PHI	.250	.500	.750
.000	-.2210	-.2220	
90.000	-.2360	-.2310	-.2310
135.000	-.2550	-.2540	-.2310
180.000	-.0240	-.0470	-.2450
225.000	-.2890	-.2460	-.2360
270.000	-.2260	-.2210	-.2150

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.310

X/LNP PHI	.250	.500	.750
.000	-.1620	-.1650	
90.000	-.1710	-.1640	-.1630
135.000	-.1390	-.1470	-.1680
180.000	.0440	.0840	-.1630
225.000	-.2000	-.1940	-.1700
270.000	-.1700	-.1670	-.1650

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.270

X/LNP PHI	.250	.500	.750
.000	-.1660	-.1720	
90.000	-.1760	-.1710	-.1660
135.000	-.1610	-.1730	-.1750
180.000	.0230	-.0390	-.1850
225.000	-.2080	-.1830	-.1870
270.000	-.1780	-.1740	-.1680

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230

X/LNP PHI	.250	.500	.750
.000	-.1680	-.1710	
90.000	-.1760	-.1720	-.1680
135.000	-.1870	-.1810	-.1760
180.000	.0080	-.0270	-.1830
225.000	-.2040	-.1780	-.1860
270.000	-.1760	-.1750	-.1680

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.920

X/LNP PHI	.250	.500	.750
.000	-.1730	-.1760	
90.000	-.1820	-.1780	-.1750
135.000	-.2210	-.1890	-.1920
180.000	.0450	.0270	-.1850
225.000	-.2040	-.1920	-.1890

DATE 21 SEP

RELATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 Q2A + S3 + T9 UPPER MPS NOZZLE

(RBO048)

SECTION ( 1 ) MPS NOZZLE  
DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.920	X/LNP	.250	.500	.750
		PHI			
		270.000	-.1800	-.1770	-.1730
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.960	X/LNP	.250	.500	.750
		PHI			
		.000	-.1760	-.1800	
		90.000	-.1840	-.1810	-.1790
		135.000	-.2270	-.1980	-.1930
		180.000	.0260	.0170	-.1960
		225.000	-.1890	-.2030	-.1980
		270.000	-.1890	-.1830	-.1740
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.000	X/LNP	.250	.500	.750
		PHI			
		.000	-.1680	-.1740	
		90.000	-.1780	-.1770	-.1770
		135.000	-.2100	-.2080	-.1800
		180.000	.0240	.1400	-.1950
		225.000	-.1620	-.1870	-.1970
		270.000	-.1820	-.1720	-.1680

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBOCUG) ( 24 MAY 73 )

AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .14200 INCHES  
 BREF = 39.8490 INCHES ZMRP = .14200 INCHES  
 SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -6.1000 ORBINC = .5000  
 RUDDER = .0000 ELEVON = .0000  
 RUOFLR = .0000

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.160

X/LNP	.250	.500	.750
PHI			
.000	-.2200	-.2190	
90.000	-.2190	-.2160	-.2170
135.000	-.2730	-.2230	-.2340
180.000	-.1230	-.0040	-.2330
225.000	-.2580	-.2420	-.2210
270.000	-.2280	-.2240	-.2190

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.170

X/LNP	.250	.500	.750
PHI			
.000	-.2170	-.2160	
90.000	-.2180	-.2160	-.2190
135.000	-.2750	-.2300	-.2370
180.000	-.0530	-.0730	-.2370
225.000	-.2480	-.2440	-.2220
270.000	-.2240	-.2220	-.2190

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.180

X/LNP	.250	.500	.750
PHI			
.000	-.2210	-.2210	
90.000	-.2210	-.2220	-.2230
135.000	-.2730	-.2290	-.2340
180.000	-.1410	-.1470	-.2340
225.000	-.2450	-.2460	-.2280
270.000	-.2290	-.2250	-.2240

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 3.640

X/LNP	.250	.500	.750
PHI			
.000	-.2210	-.2210	
90.000	-.2300	-.2270	-.2270
135.000	-.2430	-.2490	-.2270
180.000	-.1680	-.1130	-.2370
225.000	-.2680	-.2330	-.2330
270.000	-.2210	-.2210	-.2210

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 5.690

X/LNP	.250	.500	.750
PHI			
.000	-.2160	-.2140	
90.000	-.2240	-.2220	-.2210
135.000	-.2490	-.2510	-.2210
180.000	-.1670	-.1110	-.2380
225.000	-.2820	-.2380	-.2410



AMES 97-707 1A9 Q2A + S3 + T9 UPPER MPS NOZZLE

(RBO099)

## SECTION ( 1 ) MPS NOZ:

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 5.680

X/LNF	.250	.500	.750
PHI			
270.000	-.2190	-.2160	-.2160

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 7.740

X/LNF	.250	.500	.750
PHI			
.000	-.2180	-.2160	
90.000	-.2290	-.2260	-.2200
135.000	-.2660	-.2380	-.2210
180.000	-.0430	-.0620	-.2370
225.000	-.2790	-.2340	-.2350
270.000	-.2220	-.2180	-.2120

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.340

X/LNF	.250	.500	.750
PHI			
.000	-.1530	-.1560	
90.000	-.1630	-.1560	-.1480
135.000	-.1240	-.1430	-.1610
180.000	.0400	.0630	-.1720
225.000	-.1970	-.1850	-.1650
270.000	-.1630	-.1590	-.1560

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.300

X/LNF	.250	.500	.750
PHI			
.000	-.1600	-.1630	
90.000	-.1720	-.1650	-.1580
135.000	-.1370	-.1680	-.1720
180.000	.0570	.0380	-.1770
225.000	-.2060	-.1780	-.1830
270.000	-.1700	-.1670	-.1610

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.250

X/LNF	.250	.500	.750
PHI			
.000	-.1630	-.1670	
90.000	-.1700	-.1680	-.1620
135.000	-.1710	-.1760	-.1720
180.000	.1480	-.0070	-.1720
225.000	-.2010	-.1730	-.1820
270.000	-.1710	-.1690	-.1630

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.930

X/LNF	.250	.500	.750
PHI			
.000	-.1670	-.1700	
90.000	-.1810	-.1750	-.1710
135.000	-.2210	-.1880	-.1870
180.000	.0890	.0290	-.1800
225.000	-.1920	-.1900	-.1880

(R80009)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 OEA + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000    BETAT ( 4 ) = 3.930	X/LNP	.250	.500
	PHI		
	270.000	-.1780	-.1740
			-.1690
MACH ( 2 ) = 2.000    BETAT ( 5 ) = 8.020	X/LNP	.250	.500
	PHI		
	.000	-.1600	-.1650
	90.000	-.1700	-.1670
	135.000	-.2120	-.1910
	180.000	.0760	.0690
	225.000	-.1390	-.1780
	270.000	-.1780	-.1670
			-.1600

INSULATED PRESSURE DATA - 1A98

AMEC 97-70.7 1A9 OCA + S3 + T9 UPPER MPS NOZZLE

REFERENCE DATA

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .500  
RUDDER = .000 ELEVON = .000  
RUOFLR = .000

SREF = 2.4210 SQ. FT. XREF = 20.5344 INCHES  
LREF = 39.0490 INCHES YREF = .0000 INCHES  
BREF = 39.0490 INCHES ZREF = .0000 INCHES  
SCALE = .0000 SCALE

SECTION ( 1 ) MPS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.200	X/LNP	.250	.500	.750
PHI					
		.000	-.2100	-.2120	
		90.000	-.2130	-.2100	-.2090
		135.000	-.2700	-.2190	-.2300
		180.000	-.0880	-.0400	-.2290
		225.000	-.2450	-.2370	-.2110
		270.000	-.2180	-.2140	-.2100

MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.210	X/LNP	.250	.500	.750
PHI					
		.000	-.2110	-.2070	
		90.000	-.2120	-.2100	-.2090
		135.000	-.2690	-.2200	-.2300
		180.000	-.0300	-.0560	-.2300
		225.000	-.2400	-.2390	-.2110
		270.000	-.2140	-.2120	-.2090

MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.220	X/LNP	.250	.500	.750
PHI					
		.000	-.2140	-.2160	
		90.000	-.2150	-.2190	-.2170
		135.000	-.2720	-.2280	-.2320
		180.000	-.0400	-.0760	-.2320
		225.000	-.2400	-.2430	-.2200
		270.000	-.2180	-.2190	-.2180

MACH ( 1 ) = 1.555	BETAT ( 4 ) = 3.650	X/LNP	.250	.500	.750
PHI					
		.000	-.2130	-.2110	
		90.000	-.2190	-.2180	-.2170
		135.000	-.2350	-.2420	-.2170
		180.000	-.0510	-.0250	-.2300
		225.000	-.2670	-.2320	-.2320
		270.000	-.2140	-.2140	-.2140

MACH ( 1 ) = 1.555	BETAT ( 5 ) = 5.710	X/LNP	.250	.500	.750
PHI					
		.000	-.2100	-.2090	
		90.000	-.2180	-.2150	-.2130
		135.000	-.2410	-.2460	-.2120
		180.000	-.0410	-.0300	-.2320
		225.000	-.2640	-.2340	-.2360

AMES 97-7J7 1A9 CEA + S3 + T9 UPPER MPS NOZZLE

(RBO01U)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 5.710 X/LNP .250 .500 .750  
PHI  
270.000 - .2140 - .2140 - .2140 - .2110

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 7.770 X/LNP .250 .500 .750  
PHI  
.000 - .2100 - .2100  
90.000 - .2220 - .2190 - .2120  
135.000 - .2570 - .2360 - .2130  
180.000 - .0510 - .0510 - .2310  
225.000 - .2790 - .2260 - .2300  
270.000 - .2140 - .2140 - .2160

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.390 X/LNP .250 .500 .750  
PHI  
.000 - .1490 - .1520  
90.000 - .1630 - .1540 - .1450  
135.000 - .1980 - .1490 - .1630  
180.000 .0560 - .0020 - .1680  
225.000 - .1990 - .1750 - .1690  
270.000 - .1640 - .1560 - .1510

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330 X/LNP .250 .500 .750  
PHI  
.000 - .1590 - .1610  
90.000 - .1710 - .1650 - .1570  
135.000 - .1140 - .1750 - .1750  
180.000 .0820 - .0220 - .1750  
225.000 - .2150 - .1780 - .1830  
270.000 - .1710 - .1670 - .1640

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280 X/LNP .250 .500 .750  
PHI  
.000 - .1610 - .1640  
90.000 - .1690 - .1680 - .1590  
135.000 - .1580 - .1780 - .1730  
180.000 .0850 .0230 - .1730  
225.000 - .2040 - .1690 - .1820  
270.000 - .1740 - .1670 - .1610

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -3.170 X/LNP .250 .500 .750  
PHI  
.000 - .1550 - .1560  
90.000 - .1580 - .1570 - .1560  
135.000 - .2210 - .1650 - .1750  
180.000 .0510 .0530 - .1640  
225.000 - .2040 - .1710 - .1740

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AWES 97-707 1A9 Q2A + S3 + T9 UPPER MPS NOZZLE  
 (R80010)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170	X/LNP	.250	.500 .750
	PHI		
	270.000	-.1590	-.1600 -.1540
	X/LNP	.250	.500 .750
	PHI		
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.940	.000	-.1630	-.1660
	90.000	-.1780	-.1720 -.1670
	135.000	-.2190	-.1870 -.1870
	180.000	.1220	.0390 -.1750
	225.000	-.1780	-.1990 -.1870
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 9.980	270.000	-.1770	-.1740 -.1630
	X/LNP	.250	.500 .750
	PHI		
	.000	-.1630	-.1690
	90.000	-.1780	-.1710 -.1600
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.050	135.000	-.2210	-.1980 -.1800
	180.000	.0980	-.0210 -.1770
	225.000	-.1320	-.2050 -.1960
	270.000	-.1870	-.1750 -.1680
	X/LNP	.250	.500 .750
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.050	PHI		
	.000	-.1540	-.1580
	90.000	-.1640	-.1610 -.1580
	135.000	-.2120	-.1850 -.1710
	180.000	.1070	.0420 -.1790
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.050	225.000	-.1200	-.1790 -.1870
	270.000	-.1780	-.1640 -.1550
	X/LNP	.250	.500 .750
	PHI		
	.000	-.1540	-.1580

	X/LNF	.250	.500	.750
FMI	.160	-.2190	-.2160	-.2230
90° LNF	.160	-.2260	-.2260	-.2260
135° LNF	.160	-.2450	-.2500	-.2370
180° LNF	.160	-.0360	-.0110	-.2370
225° LNF	.160	-.2750	-.2360	-.2360

DATE 21 SEP 77

ADULATED PRESSURE DATA - 1A98  
AMES 97-7:7 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RBD011)

SECTION : 1) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH : 1) = 1.555 BETAT ( 5) = 3.940		X/LNP	.250 .500 .750
		PHI	
		270.000	-.2170 -.2180 -.2180
MACH ( 1) = 1.555 BETAT ( 6) = 6.000		X/LNP	.250 .500 .750
		PHI	
		.000	-.2190 -.2180
		90.000	-.2270 -.2260 -.2220
		135.000	-.2580 -.2600 -.2250
		180.000	-.0060 -.0050 -.2430
		225.000	-.2900 -.2450 -.2490
		270.000	-.2260 -.2230 -.2170
MACH ( 1) = 1.555 BETAT ( 7) = 8.060		X/LNP	.250 .500 .750
		PHI	
		.000	-.2190 -.2170
		90.000	-.2320 -.2280 -.2230
		135.000	-.2760 -.2490 -.2240
		180.000	.0020 -.0060 -.2410
		225.000	-.2820 -.2320 -.2410
		270.000	-.2210 -.2210 -.2120
MACH ( 2) = 2.000 BETAT ( 1) = -8.390		X/LNP	.250 .500 .750
		PHI	
		.000	-.1530 -.1570
		90.000	-.1700 -.1580 -.1540
		135.000	-.0880 -.1580 -.1710
		180.000	.0060 -.0080 -.1720
		225.000	-.2100 -.1780 -.1740
		270.000	-.1650 -.1590 -.1540
MACH ( 2) = 2.000 BETAT ( 2) = -6.340		X/LNP	.250 .500 .750
		PHI	
		.000	-.1610 -.1640
		90.000	-.1740 -.1680 -.1620
		135.000	-.1100 -.1800 -.1820
		180.000	.0060 -.0090 -.1760
		225.000	-.2080 -.1810 -.1860
		270.000	-.1720 -.1690 -.1620
MACH ( 2) = 2.000 BETAT ( 3) = -4.290		X/LNP	.250 .500 .750
		PHI	
		.000	-.1630 -.1650
		90.000	-.1720 -.1690 -.1610
		135.000	-.1510 -.1840 -.1780
		180.000	.0090 .0320 -.1740
		225.000	-.2020 -.1710 -.1850

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(R80011)

SECTION : 1) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.290	X/LNP	.250 .500 .750
		PHI	
		270.000	-.1710 -.1680 -.1630
		X/LNP	.250 .500 .750
		PHI	
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.180	.000	-.1570 -.1580
		90.000	-.1570 -.1570 -.1590
		135.000	-.2260 -.1650 -.1760
		180.000	.1580 .0500 -.1650
		225.000	-.2010 -.1740 -.1710
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	270.000	-.1640 -.1590 -.1550
		X/LNP	.250 .500 .750
		PHI	
		.000	-.1640 -.1670
		90.000	-.1750 -.1730 -.1670
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	135.000	1.2200 -.1860 -.1860
		180.000	.1370 .0490 -.1740
		225.000	-.1670 -.1970 -.1910
		270.000	-.1770 -.1710 -.1650
		X/LNP	.250 .500 .750
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.040	PHI	
		.000	-.1660 -.1750
		90.000	-.1790 -.1740 -.1740
		135.000	-.2240 -.2140 -.1830
		180.000	.1100 .0450 -.1740
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.040	225.000	-.1220 -.2070 -.1990
		270.000	-.1910 -.1840 -.1710
		X/LNP	.250 .500 .750
		PHI	
		.000	-.1590 -.1610
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.040	90.000	-.1660 -.1630 -.1620
		135.000	-.2180 -.1880 -.1720
		180.000	.1350 .0410 -.1780
		225.000	-.1050 -.1830 -.1910
		270.000	-.1830 -.1690 -.1640



DATE: 21 SEP 75

TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 ORA + S3 + T9 UPPER MPS NOZZLE

(RBD12) ( 24 MAY 75 )

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500  
RUDDER = -15.000 ELEVON = .000  
RUOFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.F. VWRP = 25.9300 INCHES  
LREF = 39.8490 INCHES VWRP = .0000 INCHES  
BREF = 39.8490 INCHES ZWRP = .0000 INCHES  
SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE	MACH ( 1 ) = 1.555	BETAT ( 1 ) = -6.350	X/LNF	PHI	.250	.500	.750
			.000		-.2310	-.2300	
			90.000		-.2330	-.2270	-.2310
			135.000		-.2770	-.2420	-.2490
			180.000		-.1160	.0030	-.2510
			225.000		-.2740	-.2590	-.2360
			270.000		-.2430	-.2360	-.2390
			X/LNF	.250	.500	.750	
			PHI		-.2260	-.2250	
			90.000		-.2290	-.2250	-.2280
			135.000		-.2790	-.2390	-.2490
			180.000		-.1670	-.1510	-.2480
			225.000		-.2610	-.2520	-.2310
			270.000		-.2350	-.2320	-.2340
			X/LNF	.250	.500	.750	
			PHI		-.2330	-.2310	
			90.000		-.2330	-.2330	-.2340
			135.000		-.2780	-.2420	-.2470
			180.000		-.1650	-.1840	-.2480
			225.000		-.2550	-.2540	-.2360
			270.000		-.2390	-.2350	-.2350
			X/LNF	.250	.500	.750	
			PHI		-.2430	-.2430	
			90.000		-.2470	-.2470	-.2430
			135.000		-.2630	-.2560	-.2550
			180.000		-.1220	-.1800	-.2560
			225.000		-.2630	-.2530	-.2520
			270.000		-.2450	-.2440	-.2410
			X/LNF	.250	.500	.750	
			PHI		-.2270	-.2260	
			90.000		-.2370	-.2330	-.2340
			135.000		-.2530	-.2510	-.2360
			180.000		-.1840	-.1530	-.2430
			225.000		-.2690	-.2400	-.2380
			270.000		-.2690	-.2400	-.2380
			X/LNF	.250	.500	.750	
			PHI		-.2270	-.2260	
			90.000		-.2370	-.2330	-.2340
			135.000		-.2530	-.2510	-.2360
			180.000		-.1840	-.1530	-.2430
			225.000		-.2690	-.2400	-.2380
			270.000		-.2690	-.2400	-.2380

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.260

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -3.170

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990

AMES 97-707 1A9 O2A + S3 + T9 UPPER MPS NOZZLE

(R50012)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CF

MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.930	X/LNF	.250	.500	.750
		PHI			
		270.000	-.2270	-.2270	-.2270
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	X/LNF	.250	.500	.750
		PHI			
		.000	-.2280	-.2290	
		90.000	-.2390	-.2350	-.2350
		135.000	-.2670	-.2650	-.2380
		180.000	-.1450	-.1430	-.2530
		225.000	-.2880	-.2550	-.2520
		270.000	-.2330	-.2290	-.2280
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.020	X/LNF	.250	.500	.750
		PHI			
		.000	-.2300	-.2290	
		90.000	-.2400	-.2370	-.2350
		135.000	-.2810	-.2590	-.2380
		180.000	-.1330	-.1480	-.2520
		225.000	-.2880	-.2460	-.2480
		270.000	-.2310	-.2280	-.2240
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.320	X/LNF	.250	.500	.750
		PHI			
		.000	-.1650	-.1680	
		90.000	-.1720	-.1640	-.1620
		135.000	-.1400	-.1540	-.1710
		180.000	.0120	.1480	-.1840
		225.000	-.2030	-.1940	-.1750
		270.000	-.1720	-.1690	-.1670
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.280	X/LNF	.250	.500	.750
		PHI			
		.000	-.1750	-.1770	
		90.000	-.1830	-.1770	-.1710
		135.000	-.1570	-.1750	-.1850
		180.000	.0270	-.0570	-.1870
		225.000	-.2150	-.1890	-.1930
		270.000	-.1810	-.1790	-.1750
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.240	X/LNF	.250	.500	.750
		PHI			
		.000	-.1730	-.1760	
		90.000	-.1800	-.1750	-.1710
		135.000	-.1860	-.1830	-.1820
		180.000	.0980	-.0300	-.1840
		225.000	-.2070	-.1830	-.1940

(RBOC:2)

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

SECTION 1 11MFS NOZZLE		DEPENDENT VARIABLE CP	
MACH (2) = 2.0000 BETAT (3) = -4.240	X/LNF	.250	.500 .750
	PHI		
	270.000	-.1780	-.1780 -.1720
MACH (2) = 2.0000 BETAT (4) = -.170	X/LNF	.250	.500 .750
	PHI		
	.000	-.1730	-.1740
	90.000	-.1760	-.1740
	135.000	-.2300	-.1820
MACH (2) = 2.0000 BETAT (5) = 3.920	X/LNF	.250	.500 .750
	PHI		
	.000	-.1760	-.1800
	90.000	-.1850	-.1820
	135.000	-.2260	-.1940
MACH (2) = 2.0000 BETAT (6) = 5.960	X/LNF	.250	.500 .750
	PHI		
	.000	-.1740	-.1780
	90.000	-.1840	-.1800
	135.000	-.2290	-.1950
MACH (2) = 2.0000 BETAT (7) = 8.000	X/LNF	.250	.500 .750
	PHI		
	.000	-.1680	-.1710
	90.000	-.1760	-.1730
	135.000	-.2100	-.2020

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 OCA + S3 + T9 UPPER WPS NOZZLE (RB0013) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUOFLR = .000

## SECTION ( 1 ) WPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.310

X/LNP	.250	.500	.750
PHI	.000	-.2460	-.2450
	90.000	-.2490	-.2450
	135.000	-.2940	-.2650
	180.000	-.1239	-.0550
	225.000	-.2790	-.2680
	270.000	-.2570	-.2520

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.280

X/LNP	.250	.500	.750
PHI	.000	-.2430	-.2450
	90.000	-.2460	-.2 30
	135.000	-.2780	-.2580
	180.000	-.0370	-.0640
	225.000	-.2710	-.2740
	270.000	-.2510	-.2480

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

X/LNP	.250	.500	.750
PHI	.000	-.2380	-.2380
	90.000	-.2390	-.2410
	135.000	-.2670	-.2480
	180.000	-.1110	-.1280
	225.000	-.2640	-.2510
	270.000	-.2470	-.2430

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -7.140

X/LNP	.250	.500	.750
PHI	.000	-.2420	-.2430
	90.000	-.2470	-.2460
	135.000	-.2540	-.2590
	180.000	-.1040	-.1340
	225.000	-.2610	-.2530
	270.000	-.2460	-.2430

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

X/LNP	.250	.500	.750
PHI	.000	-.2390	-.2390
	90.000	-.2440	-.2410
	135.000	-.2590	-.2520
	180.000	-.1070	-.1040
	225.000	-.2710	-.2510

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBOD13)

AMES 97-757 1A9 O2A + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

X/LNF	.250	.500	.750
PHI			
270.000	-.2340	-.2330	-.2340

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990

X/LNF	.250	.500	.750
PHI			
.000	-.2370	-.2380	
90.000	-.2470	-.2440	-.2460
135.000	-.2700	-.2740	-.2500
180.000	-.0270	-.1440	-.2590
225.000	-.2840	-.2590	-.2490
270.000	-.2400	-.2370	-.2560

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.030

X/LNF	.250	.500	.750
PHI			
.000	-.2480	-.2450	
90.000	-.2560	-.2540	-.2530
135.000	-.2860	-.2720	-.2550
180.000	-.0380	.0150	-.2670
225.000	-.2950	-.2670	-.2570
270.000	-.2490	-.2430	-.2420

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.300

X/LNF	.250	.500	.750
PHI			
.000	-.1700	-.1720	
90.000	-.1750	-.1710	-.1740
135.000	-.1840	-.1840	-.1840
180.000	-.0690	.0710	-.1910
225.000	-.1920	-.1890	-.1750
270.000	-.1780	-.1750	-.1710

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260

X/LNF	.250	.500	.750
PHI			
.000	-.1800	-.1840	
90.000	-.1860	-.1800	-.1810
135.000	-.1960	-.1880	-.1880
180.000	-.0300	.0460	-.1960
225.000	-.2130	-.2050	-.1880
270.000	-.1880	-.1860	-.1830

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220

X/LNF	.250	.500	.750
PHI			
.000	-.1830	-.1850	
90.000	-.1890	-.1850	-.1850
135.000	-.2060	-.1980	-.1910
180.000	-.0360	-.0520	-.2120
225.000	-.2140	-.1940	-.2000

AMES 97-707 1A9 CBA + S3 + T9 UPPER MPS NOZZLE

(RBC033)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220

X/LNP	.250	.500	.750
PHI			
270.000	-.1900	-.1890	-.1840

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.140

X/LNP	.250	.500	.750
PHI			
.000	-.1760	-.1790	
90.000	-.1810	-.1790	-.1790
135.000	-.2230	-.1880	-.1940
180.000	.0360	-.0030	-.1860
225.000	-.2080	-.1930	-.1860
270.000	-.1810	-.1800	-.1750

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.980

X/LNP	.250	.500	.750
PHI			
.000	-.1790	-.1810	
90.000	-.1870	-.1830	-.1810
135.000	-.2200	-.1900	-.1820
180.000	-.0090	.0390	-.1950
225.000	-.2180	-.1960	-.1910
270.000	-.1840	-.1810	-.1760

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980

X/LNP	.250	.500	.750
PHI			
.000	-.1750	-.1760	
90.000	-.1810	-.1790	-.1790
135.000	-.2090	-.1980	-.1810
180.000	-.0310	.0730	-.1940
225.000	-.2110	-.1850	-.1930
270.000	-.1820	-.1760	-.1720

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.020

X/LNP	.250	.500	.750
PHI			
.000	-.1770	-.1790	
90.000	-.1860	-.1830	-.1830
135.000	-.2020	-.1950	-.1830
180.000	.0160	.0130	-.1980
225.000	-.2010	-.1910	-.2020
270.000	-.1920	-.1830	-.1750

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ISOLATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 OCA + S3 - T9 UPPER MPS NOZZLE

(RB0014) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .03000 SCALE

## PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .500  
 RUDDFLR = .000

## DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE	MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.500	X/LNP	PHI	X/LNP	PHI
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.260			.000	-2600	.2610	.750
			90.000	-2640	-2630	
			135.000	-3060	-2710	
			180.000	-1400	-2710	
			225.000	-2900	-2640	
			270.000	-2680	-2630	
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220			.000	-2570	-2580	.750
			90.000	-2590	-2630	
			135.000	-2870	-2690	
			180.000	-0820	-1010	
			225.000	-2830	-2610	
			270.000	-2660	-2620	
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120			.000	-2510	-2510	.750
			90.000	-2520	-2510	
			135.000	-2730	-2540	
			180.000	-0690	-1420	
			225.000	-2710	-2570	
			270.000	-2560	-2530	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990			.000	-2360	-2350	.750
			90.000	-2400	-2390	
			135.000	-2380	-2530	
			180.000	-0820	-1750	
			225.000	-2470	-2480	
			270.000	-2410	-2380	

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-757 1A9 OEA + S3 + T9 UPPER MPS NOZZLE

(RBC014)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP				
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.950	X/LNP	.250	.500	.750	
		PHI				
		270.000	-.2480	-.2450	-.2450	
		X/LNP	.250	.500	.750	
		PHI				
		.000	-.2480	-.2510		
		90.000	-.2570	-.2540	-.2590	
		135.000	-.2800	-.2750	-.2570	
		180.000	-.0550	-.0770	-.2630	
		225.000	-.2890	-.2720	-.2540	
		270.000	-.2500	-.2460	-.2460	
		X/LNP	.250	.500	.750	
		PHI				
		.000	-.2570	-.2580		
		90.000	-.2690	-.2640	-.2640	
		135.000	-.2880	-.2770	-.2650	
		180.000	-.0660	-.0750	-.2730	
		225.000	-.3050	-.2820	-.2630	
		270.000	-.2590	-.2550	-.2540	
		X/LNP	.250	.500	.750	
		PHI				
		.000	-.1850	-.1810		
		90.000	-.1940	-.1870	-.1860	
		135.000	-.1920	-.1830	-.1920	
		180.000	-.1240	-.1110	-.2170	
		225.000	-.2160	-.1930	-.1860	
		270.000	-.1890	-.1860	-.1810	
		X/LNP	.250	.500	.750	
		PHI				
		.000	-.1860	-.1860		
		90.000	-.1900	-.1880	-.1870	
		135.000	-.2120	-.1910	-.1950	
		180.000	-.0960	-.1280	-.2010	
		225.000	-.2100	-.2000	-.1890	
		270.000	-.1910	-.1900	-.1860	
		X/LNP	.250	.500	.750	
		PHI				
		.000	-.1880	-.1900		
		90.000	-.1920	-.1900	-.1890	
		135.000	-.2300	-.2020	-.1970	
		180.000	-.1420	-.1630	-.2040	
		225.000	-.2140	-.2040	-.2000	

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200



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INSULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 08A + S3 + T9 UPPER 1A9 NOZZLE

(RBC014)

SECTION ( 1 ) MP'S NOZZLE  
DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.250  
X/LNP .250 .500 .750  
PHI  
270.000 -.1950 -.1930 -.1880

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.130  
X/LNP .250 .500 .750  
PHI  
.000 -.1820 -.1840  
90.000 -.1850 -.1830 -.1840  
135.000 -.2050 -.1910 -.1970  
180.000 .0080 -.0420 -.1920  
225.000 -.2080 -.1980 -.1940  
270.000 -.1870 -.1850 -.1810

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950  
X/LNP .250 .500 .750  
PHI  
.000 -.1680 -.1900  
90.000 -.1960 -.1930 -.1980  
135.000 .2240 -.2100 -.1970  
180.000 .0290 -.0450 -.2030  
225.000 -.2350 -.2100 -.2000  
270.000 -.1940 -.1910 -.1870

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.990  
X/LNP .250 .500 .750  
PHI  
.000 -.1800 -.1810  
90.000 -.1880 -.1870 -.1860  
135.000 -.2020 -.1980 -.1870  
180.000 -.0790 -.0760 -.1980  
225.000 -.2240 -.1850 -.1950  
270.000 -.1890 -.1860 -.1790

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040  
X/LNP .250 .500 .750  
PHI  
.000 -.1910 -.1930  
90.000 -.2020 -.1990 -.1970  
135.000 -.2150 -.2070 -.1980  
180.000 -.0580 -.0500 -.2100  
225.000 -.2140 -.2100 -.2090  
270.000 -.2160 -.1970 -.1890

AMES 97-787 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(R80015) ( 24 MAY 75 )

## REFERENCE DATA

SREF = 2.4210 98.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 6.0000 ORBINC = .500  
 RUDDER = -15.0000 ELEVON = .000  
 RUFLR = .000

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.320  
 X/LNP .250 .500 .750  
 PHI  
 .000 -.2600 -.2610  
 90.000 -.2600 -.2600 -.2660  
 135.000 -.2930 -.2780 -.2700  
 180.000 -.1900 -.2180 -.2740  
 225.000 -.2670 -.2720 -.2650  
 270.000 -.2650 -.2630 -.2630

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.280

X/LNP .250 .500 .750  
 PHI  
 .000 -.2580 -.2600  
 90.000 -.2620 -.2610 -.2620  
 135.000 -.2910 -.2780 -.2670  
 180.000 -.1080 -.1410 -.2780  
 225.000 -.2840 -.2810 -.2660  
 270.000 -.2660 -.2630 -.2620

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230

X/LNP .250 .500 .750  
 PHI  
 .000 -.2490 -.2520  
 90.000 -.2550 -.2520 -.2510  
 135.000 -.2720 -.2710 -.2570  
 180.000 -.1790 -.1370 -.2660  
 225.000 -.2740 -.2680 -.2590  
 270.000 -.2580 -.2560 -.2540

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120

X/LNP .250 .500 .750  
 PHI  
 .000 -.2390 -.2390  
 90.000 -.2440 -.2420 -.2410  
 135.000 -.2420 -.2550 -.2440  
 180.000 -.1890 -.1980 -.2430  
 225.000 -.2480 -.2500 -.2420  
 270.000 -.2450 -.2420 -.2400

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.970

X/LNP .250 .500 .750  
 PHI  
 .000 -.2440 -.2430  
 90.000 -.2500 -.2480 -.2490  
 135.000 -.2650 -.2650 -.2510  
 180.000 -.1680 -.1450 -.2540  
 225.000 -.2710 -.2590 -.2460

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TABULATED PRESSURE DATA - 1A9E

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AMES 97-707 1A9 O2A + S3 + T9 UPPER MPS NOZZLE

(RB3D15)

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.970

X/LNP	.250	.500	.750
PHI			
275.000	-.2450	-.2420	-.2420

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.030

X/LNP	.250	.500	.750
PHI			
90.000	-.2520	-.2540	
135.000	-.2600	-.2580	-.2580
180.000	-.2810	-.2730	-.2600
225.000	-.1030	-.1190	-.2670
275.000	-.2910	-.2790	-.2580
	-.2540	-.2520	-.2500

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.080

X/LNP	.250	.500	.750
PHI			
90.000	-.2620	-.2630	
135.000	-.2740	-.2710	-.2690
180.000	-.2680	-.2770	-.2710
225.000	-.1330	-.1030	-.2780
275.000	-.3320	-.2770	-.2720
	-.2640	-.2620	-.2610

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.260

X/LNP	.250	.500	.750
PHI			
90.000	-.1870	-.1880	
135.000	-.1940	-.1910	-.1910
180.000	-.2050	-.1910	-.1930
225.000	-.1040	-.0310	-.2010
275.000	-.2160	-.2030	-.1910
	-.1910	-.1920	-.1870

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -4.210

X/LNP	.250	.500	.750
PHI			
90.000	-.1880	-.2030	
135.000	-.1930	-.2160	-.2070
180.000	-.2220	-.2210	-.2110
225.000	-.0410	-.0810	-.2210
275.000	-.2120	-.2170	-.2140
	-.2110	-.2090	-.2030

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -.130

X/LNP	.250	.500	.750
PHI			
90.000	-.1840	-.1850	
135.000	-.1870	-.1860	-.1870
180.000	-.2010	-.1890	-.1960
225.000	-.1450	-.1690	-.1930
275.000	-.2100	-.2030	-.1890

DATE 23 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9-05A + S3 + T9 UPPER MPS NOZZLE

(R80015)

SECTION ( 3 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -.130

X/LNP	.250	.500	.750
PHI			
270.000	-.1880	-.1870	-.1850

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.970

X/LNP	.250	.500	.750
PHI			
.000	-.1870	-.1890	
90.000	-.1920	-.1920	-.1940
135.000	-.2140	-.2050	-.1940
180.000	-.0475	-.1040	-.2030
225.000	-.2280	-.2120	-.2020
270.000	-.1950	-.1920	-.1870

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 6.020

X/LNP	.250	.500	.750
PHI			
.000	-.1820	-.1690	
90.000	-.1930	-.1730	-.1730
135.000	-.2030	-.1850	-.1750
180.000	-.1190	-.0480	-.1820
225.000	-.2110	-.1670	-.1820
270.000	-.1770	-.1730	-.1670

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.070

X/LNP	.250	.500	.750
PHI			
.000	-.1880	-.1880	
90.000	-.1970	-.1940	-.1930
135.000	-.2070	-.2010	-.1940
180.000	-.0390	-.0240	-.2040
225.000	-.2170	-.1920	-.2040
270.000	-.2000	-.1930	-.1830

(RBCD16) ( 24 MAY 73 )

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B  
AMES 37-707 1A9 O2A + S3 + T9 UPPER MPS NOZZLE

PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .500  
RUDDER = -15.000 ELEVON = .000  
RUDDER = .000

REFREX DATA  
SREF = 2.4210 INCHES XMRP = 26.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE	MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.350	X/LNP	.250	.500	.750
			PHI			
			.000	-.2630	-.2640	
			90.000	-.2710	-.2680	-.2690
			135.000	-.2890	-.2700	-.2710
			180.000	-.2160	-.2410	-.2740
			225.000	-.2880	-.2690	-.2670
			270.000	-.2720	-.2670	-.2680

MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.290	X/LNF	.250	.500	.750
		PHI			
		.000	-.2560	-.2590	
		90.000	-.2630	-.2610	-.2590
		135.000	-.2760	-.2660	-.2630
		180.000	-.1330	-.1650	-.2720
		225.000	-.2760	-.2710	-.1630
		270.000	-.2640	-.2610	-.2610

MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	X/LNF	.250	.500	.750
		PHI			
		.000	-.2480	-.2520	
		90.000	-.2540	-.2510	-.2510
		135.000	-.2640	-.2680	-.2560
		180.000	-.1770	-.1470	-.2640
		225.000	-.2690	-.2660	-.2560
		270.000	-.2560	-.2540	-.2530

MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.110	X/LNP	.250	.500	.750
		PHI			
		.000	-.2360	-.2370	
		90.000	-.2440	-.2410	-.2390
		135.000	-.2420	-.2520	-.2420
		180.000	-.1120	-.2190	-.2420
		225.000	-.2460	-.2440	-.2410
		270.000	-.2450	-.2410	-.2360

MACH ( 1 ) = 1.555	BETAT ( 5 ) = 4.000	X/LNF	.250	.500	.750
		PHI			
		.000	-.2430	-.2450	
		90.000	-.2530	-.2510	-.2510
		135.000	-.2610	-.2670	-.2520
		180.000	-.1690	-.1690	-.2560
		225.000	-.2720	-.2620	-.2490

DATE 21 SEP 75

TABULATED PRESSURE DATA - 1A98  
AVES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RBCD16)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 4.000	X/LNP	.250 .500 .750
		PHI	
		270.000	-.2500 -2450 -2440
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.060	X/LNP	.250 .500 .750
		PHI	
		.000	-.2540 -2570
		90.000	-.2640 -2610 -2600
		135.000	-.2800 -2710 -2620
		180.000	-.1550 -1710 -2695
		225.000	-.2920 -2630 -2600
		270.000	-.2590 -2570 -2560
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.120	X/LNP	.250 .500 .750
		PHI	
		.000	-.2670 -2680
		90.000	-.2770 -2720 -2710
		135.000	-.2910 -2780 -2720
		180.000	-.1950 -1460 -2790
		225.000	-.3070 -2690 -2720
		270.000	-.2690 -2690 -2670
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -6.340	X/LNP	.250 .500 .750
		PHI	
		.000	-.2170 -2220
		90.000	-.2320 .0000 .0000
		135.000	-.2330 .0000 .0000
		180.000	-.1950 .0000 .0000
		225.000	-.2400 .0000 .0000
		270.000	-.2240 .0000 .0000
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	X/LNP	.250 .500 .750
		PHI	
		.000	-.1870 -1870
		90.000	-.1980 -1910 -1900
		135.000	-.2050 -1830 -1940
		180.000	-.1930 -1630 -2020
		225.000	-.2050 -2030 -1920
		270.000	-.1920 -1900 -1880
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.220	X/LNP	.250 .500 .750
		PHI	
		.000	-.1890 -1910
		90.000	-.1970 -1920 -1920
		135.000	-.2040 -2010 -1970
		180.000	-.0610 -0790 -2030
		225.000	-.2080 -2060 -1970

(RBC016)

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-717 1A9 OCA + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.220	...L	.250 .500 .750
		PHI	
		270.000	-.1950 -.1930 -.1900
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.120	X/LNP	.250 .500 .750
		PHI	
		.000	-.1880 -.1890
		90.000	-.1900 -.1910 -.1890
		135.000	-.2040 -.1880 -.1960
		180.000	-.0300 -.0870 -.1990
		225.000	-.2160 -.2050 -.1920
		270.000	-.1910 -.1910 -.1890
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.990	X/LNP	.250 .500 .750
		PHI	
		.000	-.1930 -.1940
		90.000	-.1990 -.1970 -.1970
		135.000	-.2170 -.2090 -.2000
		180.000	-.0890 -.0620 -.2090
		225.000	-.2190 -.2070 -.2030
		270.000	-.2000 -.1980 -.1920
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.050	X/LNP	.250 .500 .750
		PHI	
		.000	-.1830 -.1840
		90.000	-.1880 -.1870 -.1870
		135.000	-.2010 -.1970 -.1890
		180.000	-.1350 -.0180 -.1950
		225.000	-.2200 -.1830 -.1890
		270.000	-.1940 -.1860 -.1800
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.110	X/LNP	.250 .500 .750
		PHI	
		.000	-.1890 -.1890
		90.000	-.1950 -.1950 -.1950
		135.000	-.2040 -.2040 -.1960
		180.000	-.0910 .0050 -.2010
		225.000	-.2190 -.1900 -.1940
		270.000	-.1990 -.1910 -.1850

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A90

AMES 97-707 1AS OCA + S3 + T9 UPPER MPS NOZZLE

(R80017) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.955 BETAT ( 1 ) = -6.410

DEPENDENT VARIABLE CP

X/LNP	.250	.500	.750
PHI			
.000	-.2090	-.2040	
90.000	-.2070	-.2030	-.2020
135.000	-.2660	-.2150	-.2240
180.000	-.0810	.0160	-.2240
225.000	-.2460	-.2330	-.2080
270.000	-.2150	-.2100	-.2080

MACH ( 1 ) = 1.955 BETAT ( 2 ) = -6.360

X/LNP	.250	.500	.750
PHI			
.000	-.2090	-.2020	
90.000	-.2160	-.2030	-.2030
135.000	-.2630	-.2160	-.2290
180.000	-.0290	-.0320	-.2240
225.000	-.2360	-.2350	-.2160
270.000	-.2100	-.2060	-.2030

MACH ( 1 ) = 1.955 BETAT ( 3 ) = -4.300

X/LNP	.250	.500	.750
PHI			
.000	-.2150	-.2140	
90.000	-.2140	-.2150	-.2160
135.000	-.2740	-.2230	-.2290
180.000	-.0480	-.0410	-.2320
225.000	-.2430	-.2430	-.2270
270.000	-.2210	-.2180	-.2160

MACH ( 1 ) = 1.955 BETAT ( 4 ) = -.180

X/LNP	.250	.500	.750
PHI			
.000	-.2240	-.2240	
90.000	-.2280	-.2280	-.2260
135.000	-.2900	-.2370	-.2390
180.000	.0850	-.0370	-.2380
225.000	-.2460	-.2340	-.2340
270.000	-.2280	-.2240	-.2240

MACH ( 1 ) = 1.955 BETAT ( 5 ) = 3.930

X/LNP	.250	.500	.750
PHI			
.000	-.2180	-.2160	
90.000	-.2190	-.2170	-.2150
135.000	-.2350	-.2410	-.2190
180.000	-.0390	.0440	-.2270
225.000	-.2590	-.2220	-.2250

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .500  
 RUDDER = -10.000 ELEVON = .000  
 RUFLR = .000



(RBC017)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B

AMES 97-707 1A9 ORA + S3 + T9 UPPER MPS NOZZLE

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZ--

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.930  
X/LNP .250 .500 .750  
PHI 270.000 -.2080 -.2080 -.2080

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.980  
X/LNP .250 .500 .750  
PHI .000  
90.000 -.2080 -.2080  
135.000 -.2120 -.2090 -.2070  
180.000 -.2350 -.2430 -.2080  
225.000 -.0210 .0480 -.2250  
270.000 -.2690 -.2250 -.2250  
X/LNP .250 .500 .750  
PHI .000  
90.000 -.2080 -.2080  
135.000 -.2120 -.2120 -.2090  
180.000 -.2370 -.2340 -.2100  
225.000 -.0140 .0090 -.2250  
270.000 -.2740 -.2190 -.2260  
X/LNP .250 .500 .750  
PHI .000  
90.000 -.2080 -.2080  
135.000 -.2170 -.2120 -.2090  
180.000 -.2370 -.2340 -.2100  
225.000 -.0140 .0090 -.2250  
270.000 -.2740 -.2190 -.2260

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.090  
X/LNP .250 .500 .750  
PHI .000  
90.000 -.2080 -.2080  
135.000 -.2170 -.2120 -.2090  
180.000 -.2370 -.2340 -.2100  
225.000 -.0140 .0090 -.2250  
270.000 -.2740 -.2190 -.2260  
X/LNP .250 .500 .750  
PHI .000  
90.000 -.2080 -.2080  
135.000 -.2170 -.2120 -.2090  
180.000 -.2370 -.2340 -.2100  
225.000 -.0140 .0090 -.2250  
270.000 -.2740 -.2190 -.2260

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.380  
X/LNP .250 .500 .750  
PHI .000  
90.000 -.1480 -.1510  
135.000 -.1610 -.1510 -.1430  
180.000 -.0960 -.1610 -.1650  
225.000 .0670 .0240 -.1640  
270.000 -.2140 -.1780 -.1630  
X/LNP .250 .500 .750  
PHI .000  
90.000 -.1480 -.1510  
135.000 -.1610 -.1510 -.1430  
180.000 -.0960 -.1610 -.1650  
225.000 .0670 .0240 -.1640  
270.000 -.2140 -.1780 -.1630

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330  
X/LNP .250 .500 .750  
PHI .000  
90.000 -.1560 -.1640  
135.000 -.1670 -.1620 -.1550  
180.000 -.1080 -.1780 -.1740  
225.000 .0910 .0090 -.1700  
270.000 -.2030 -.1760 -.1840  
X/LNP .250 .500 .750  
PHI .000  
90.000 -.1560 -.1640  
135.000 -.1670 -.1620 -.1550  
180.000 -.1080 -.1780 -.1740  
225.000 .0910 .0090 -.1700  
270.000 -.2030 -.1760 -.1840

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280  
X/LNP .250 .500 .750  
PHI .000  
90.000 -.1590 -.1570  
135.000 -.1640 -.1630 -.1540  
180.000 -.1590 -.1720 -.1680  
225.000 .0350 .0350 -.1660  
270.000 -.1960 -.1640 -.1760  
X/LNP .250 .500 .750  
PHI .000  
90.000 -.1590 -.1570  
135.000 -.1640 -.1630 -.1540  
180.000 -.1590 -.1720 -.1680  
225.000 .0350 .0350 -.1660  
270.000 -.1960 -.1640 -.1760

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AWES 97-707 1A9 C2A + S3 + T3 UPPER MPS NOZZLE

(RBD017)

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280

X/LNP	.250	.500	.750
PHI			
270.000	-.1630	-.1630	-.1550

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170

X/LNP	.250	.500	.750
PHI			
.000	-.1580	-.1580	
90.000	-.1600	-.1580	-.1580
135.000	-.2240	-.1660	-.1780
180.000	.1620	.0520	-.1640
225.000	-.2020	-.1730	-.1720
270.000	-.1610	-.1590	-.1540

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930

X/LNF	.250	.500	.750
PHI			
.000	-.1590	-.1620	
90.000	-.1710	-.1690	-.1630
135.000	-.2180	-.1820	-.1810
180.000	.1340	.0920	-.1720
225.000	-.1780	-.1880	-.1840
270.000	-.1720	-.1660	-.1580

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.988

X/LNP	.250	.500	.750
PHI			
.000	-.1610	-.1640	
90.000	-.1740	-.1690	-.1680
135.000	-.2210	-.1910	-.1820
180.000	.1050	-.0150	-.1740
225.000	-.1340	-.2030	-.1920
270.000	-.1800	-.1720	-.1640

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040

X/LNP	.250	.500	.750
PHI			
.000	-.1530	-.1590	
90.000	-.1640	-.1610	-.1590
135.000	-.2140	-.1840	-.1720
180.000	.1280	.0260	-.1760
225.000	-.1170	-.1820	-.1880
270.000	-.1720	-.1640	-.1560

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBC018) ( 24 MAY 73 )

AMES 97-707 1A9 CBA + S3 + T9 UPPER MPS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500  
 RUDDER = -10.000 ELEVON = .000  
 RUDDFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.340  
 X/LNP .250 .500 .750  
 PHI  
 .000  
 90.000 -2260 -2270  
 135.000 -2250 -2240  
 180.000 -2390 -2400  
 225.000 -2740 -2390  
 270.000 -1210 -2470  
 .2690 -2520 -2330  
 .2350 -2330 -2310

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.300

X/LNP .250 .500 .750  
 PHI  
 .000  
 90.000 -2240 -2240  
 135.000 -2250 -2250  
 180.000 -2750 -2360  
 225.000 -1570 -2430  
 270.000 -2570 -2280  
 .2340 -2290 -2280

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.250

X/LNP .250 .500 .750  
 PHI  
 .000  
 90.000 -2280 -2280  
 135.000 -2280 -2280  
 180.000 -2730 -2370  
 225.000 -1670 -2430  
 270.000 -2490 -2330  
 .2320 -2320 -2300

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -3.160

X/LNP .250 .500 .750  
 PHI  
 .000  
 90.000 -2330 -2340  
 135.000 -2360 -2350  
 180.000 -2490 -2430  
 225.000 -1690 -2450  
 270.000 -2520 -2380  
 .2340 -2340 -2320

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.930

X/LNP .250 .500 .750  
 PHI  
 .000  
 90.000 -2240 -2220  
 135.000 -2320 -2290  
 180.000 -2450 -2310  
 225.000 -1680 -2390  
 270.000 -2610 -2330  
 .2310 -2310 -2310

DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A98

(R80018)

AMES 97-707 1AS OCA + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.930	X/LNP	.250	.500 .750
	PHI		
	270.000	-.2210	-.2230 -.2220
	X/LNP	.250	.500 .750
	PHI		
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.980	.000	-.2240	-.2230
	90.000	-.2340	-.2290 -.2310
	135.000	-.2560	-.2610 -.2310
	180.000	-.0620	.0280 -.2460
	225.000	-.2790	-.2430 -.2430
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.020	270.000	-.2240	-.2220 -.2210
	X/LNP	.250	.500 .750
	PHI		
	.000	-.2210	-.2210
	90.000	-.2300	-.2270 -.2280
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.320	135.000	-.2630	-.2540 -.2290
	180.000	-.0320	.1610 -.2470
	225.000	-.2780	-.2490 -.2340
	270.000	-.2210	-.2180 -.2150
	X/LNP	.250	.500 .750
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.270	PHI		
	.000	-.1570	-.1610
	90.000	-.1630	-.1570 -.1550
	135.000	-.1410	-.1540 -.1640
	180.000	.0120	.0600 -.1770
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230	225.000	-.1940	-.1670 -.1640
	270.000	-.1650	-.1620 -.1590
	X/LNP	.250	.500 .750
	PHI		
	.000	-.1670	-.1720
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -2.230	90.000	-.1780	-.1720 -.1680
	135.000	-.1560	-.1730 -.1770
	180.000	.0310	-.0430 -.1840
	225.000	-.2090	-.1820 -.1880
	270.000	-.1770	-.1740 -.1690
MACH ( 2 ) = 2.000 BETAT ( 5 ) = -0.230	X/LNP	.250	.500 .750
	PHI		
	.000	-.1680	-.1720
	90.000	-.1770	-.1730 -.1700
	135.000	-.1860	-.1820 -.1780
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 0.230	180.000	.0110	-.0210 -.1830
	225.000	-.2050	-.1840 -.1870
	270.000	-.1740	-.1740

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 OCA + S3 + T9 UPPER MPS NOZZLE

(RBC018)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230		X/LNP	.250 .500 .750
		PHI	
		270.000	-.1750 -.1750 -.1690
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.160		X/LNP	.250 .500 .750
		PHI	
		.000	-.1700 -.1730
		90.000	-.1750 -.1730 -.1720
		135.000	-.2270 -.1820 -.1920
		180.000	.0910 .0220 -.1780
		225.000	-.2070 -.1870 -.1820
		270.000	-.1750 -.1730 -.1690
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.920		X/LNP	.250 .500 .750
		PHI	
		.000	-.1720 -.1760
		90.000	-.1810 -.1790 -.1760
		135.000	-.2230 -.1910 -.1920
		180.000	.0510 .0120 -.1880
		225.000	-.2030 -.1930 -.1910
		270.000	-.1820 -.1790 -.1710
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.960		X/LNP	.250 .500 .750
		PHI	
		.000	-.1690 -.1730
		90.000	-.1770 -.1740 -.1740
		135.000	-.2250 -.1910 -.1840
		180.000	.0360 .0190 -.1880
		225.000	-.1830 -.1920 -.1910
		270.000	-.1830 -.1740 -.1680
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.010		X/LNP	.250 .500 .750
		PHI	
		.000	-.1620 -.1670
		90.000	-.1720 -.1690 -.1680
		135.000	-.2120 -.1980 -.1720
		180.000	.0360 .0110 -.1860
		225.000	-.1560 -.1780 -.1870
		270.000	-.1740 -.1640 -.1590

ANES 97-707 1A9 CEA + S3 + T9 UPPER MPS NOZZLE

(RBC019) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 26.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = .000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUDDLR = .000

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.320  
 X/LNP .250 .500 .750  
 PHI  
 .000 -2400 -2400  
 90.000 -2430 -2390 -2420  
 135.000 -2090 -2630 -2500  
 180.000 -1140 -1120 -2570  
 225.000 -2720 -2590 -2450  
 270.000 -2510 -2470 -2440

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270

X/LNP .250 .500 .750  
 PHI  
 .000 -2320 -2330  
 90.000 -2350 -2320 -2330  
 135.000 -2670 -2500 -2430  
 180.000 -1630 -1680 -2520  
 225.000 -2570 -2560 -2390  
 270.000 -2410 -2370 -2370

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

X/LNP .250 .500 .750  
 PHI  
 .000 -2370 -2360  
 90.000 -2370 -2370 -2390  
 135.000 -2640 -2460 -2450  
 180.000 -1130 -1390 -2460  
 225.000 -2610 -2450 -2410  
 270.000 -2430 -2440 -2390

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -1.140

X/LNP .250 .500 .750  
 PHI  
 .000 -2320 -2320  
 90.000 -2360 -2360 -2330  
 135.000 -2410 -2500 -2380  
 180.000 -10510 -1370 -2430  
 225.000 -2480 -2450 -2360  
 270.000 -2360 -2340 -2320

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990

X/LNP .250 .500 .750  
 PHI  
 .000 -2260 -2280  
 90.000 -2370 -2330 -2330  
 135.000 -2520 -2410 -2340  
 180.000 -14890 -11250 -2380  
 225.000 -2590 -2430 -2310

(RBC019)

DATE 23 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-757 1A9 02A + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.950		X/LNP	.250 .500 .750
	PHI	270.000	-.2280 -.2260 -.2250
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990		X/LNP	.250 .500 .750
	PHI	.000	-.2280 -.2290
		90.000	-.2370 -.2340 -.2360
		135.000	-.2520 -.2590 -.2390
		180.000	-.0570 -.0250 -.2490
		225.000	-.2730 -.2510 -.2380
		270.000	-.2300 -.2280 -.2270
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.040		X/LNP	.250 .500 .750
	PHI	.000	-.2370 -.2380
		90.000	-.2440 -.2410 -.2420
		135.000	-.2690 -.2580 -.2460
		180.000	-.0470 -.0180 -.2550
		225.000	-.2850 -.2580 -.2440
		270.000	-.2370 -.2340 -.2320
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.300		X/LNP	.250 .500 .750
	PHI	.000	-.1690 -.1710
		90.000	-.1720 -.1690 -.1730
		135.000	-.1870 -.1830 -.1770
		180.000	-.0730 .0550 -.1870
		225.000	-.1880 -.1890 -.1740
		270.000	-.1770 -.1740 -.1710
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260		X/LNP	.250 .500 .750
	PHI	.000	-.1760 -.1790
		90.000	-.1810 -.1760 -.1760
		135.000	-.1950 -.1840 -.1830
		180.000	-.0400 .0490 -.1920
		225.000	-.2060 -.1990 -.1810
		270.000	-.1840 -.1810 -.1780
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220		X/LNP	.250 .500 .750
	PHI	.000	-.1800 -.1820
		90.000	-.1840 -.1810 -.1810
		135.000	-.2030 -.1930 -.1880
		180.000	.0310 -.0360 -.1950
		225.000	-.2080 -.1890 -.1940

AMES 97-707 1A9 O2A + S3 + T9 UPPER MPS NOZZLE

(R00019)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.228	X/LNP	.250	.500	.750
		PHI			
		270.000	-.1840	-.1840	-.1800
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.140	X/LNP	.250	.500	.750
		PHI			
		.000	-.1770	-.1790	
		90.000	-.1810	-.1800	-.1790
		135.000	-.2200	-.1880	-.1950
		180.000	.0360	-.0040	-.1870
		225.000	-.2160	-.1930	-.1840
		270.000	-.1810	-.1790	-.1760
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	X/LNP	.250	.500	.750
		PHI			
		.000	-.1780	-.1800	
		90.000	-.1840	-.1820	-.1800
		135.000	-.2180	-.1870	-.1940
		180.000	-.0120	.0440	-.1940
		225.000	-.2190	-.1940	-.1890
		270.000	-.1830	-.1820	-.1750
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	X/LNP	.250	.500	.750
		PHI			
		.000	-.1720	-.1730	
		90.000	-.1820	-.1780	-.1770
		135.000	-.2050	-.1980	-.1790
		180.000	.0030	.0750	-.1930
		225.000	-.2130	-.1810	-.1890
		270.000	-.1820	-.1750	-.1720
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.020	X/LNP	.250	.500	.750
		PHI			
		.000	-.1770	-.1790	
		90.000	-.1840	-.1830	-.1830
		135.000	-.1970	-.2110	-.1840
		180.000	.0120	.0660	-.1990
		225.000	-.2120	-.1910	-.1980
		270.000	-.1920	-.1820	-.1750



DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
ANES 97-707 1A9 QEA + S3 + T9 UPPER MPS NOZZLE

(RBO020) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4' + 0.50 FT. XMRP = 28.5300 INCHES  
LREF = 39.4390 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .000  
RUDDER = -10.000 ELEVON = .000  
RUDDFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE		MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.300				
		X/LNP	.250	.500	.750	
		PHI				
		.000	-.2510	-.2530		
		90.000	-.2560	-.2510	-.2540	
		135.000	-.2970	-.2800	-.2620	
		180.000	-.1130	-.2330	-.2610	
		225.000	-.2770	-.2630	-.2570	
		270.000	-.2590	-.2560	-.2540	
		X/LNP	.250	.500	.750	
		PHI				
		.000	-.2490	-.2470		
		90.000	-.2480	-.2460	-.2470	
		135.000	-.2770	-.2690	-.2520	
		180.000	-.0820	-.1320	-.2620	
		225.000	-.2670	-.2650	-.2590	
		270.000	-.2520	-.2490	-.2470	
		X/LNP	.250	.500	.750	
		PHI				
		.000	-.2450	-.2460		
		90.000	-.2480	-.2460	-.2450	
		135.000	-.2680	-.2670	-.2490	
		180.000	-.1680	-.1480	-.2570	
		225.000	-.2650	-.2630	-.2500	
		270.000	-.2510	-.2490	-.2470	
		X/LNP	.250	.500	.750	
		PHI				
		.000	-.2280	-.2280		
		90.000	-.2310	-.2300	-.2290	
		135.000	-.2290	-.2420	-.2320	
		180.000	-.1850	-.1810	-.2310	
		225.000	-.2370	-.2360	-.2300	
		270.000	-.2320	-.2290	-.2280	
		X/LNP	.250	.500	.750	
		PHI				
		.000	-.2370	-.2380		
		90.000	-.2430	-.2410	-.2420	
		135.000	-.2590	-.2530	-.2420	
		180.000	-.0560	-.1740	-.2450	
		225.000	-.2670	-.2520	-.2410	
		X/LNP	.250	.500	.750	
		PHI				
		.000	-.2370	-.2380		
		90.000	-.2430	-.2410	-.2420	
		135.000	-.2590	-.2530	-.2420	
		180.000	-.0560	-.1740	-.2450	
		225.000	-.2670	-.2520	-.2410	

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.130

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.960

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 02A + 93 + T9 UPPER MPS NOZZLE

(R80020)

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.980  
X/LNP .250 .500 .750  
PHI  
270.000 -.2400 -.2360 -.2360

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.010  
X/LNP .250 .500 .750  
PHI  
.000 -.2480 -.2420  
90.000 -.2460 -.2440 -.2460  
135.000 -.2680 -.2680 -.2470  
180.000 -.0630 -.1050 -.2530  
225.000 -.2770 -.2630 -.2430  
270.000 -.2410 -.2390 -.2370

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 9.080  
X/LNP .250 .500 .750  
PHI  
.000 -.2540 -.2540  
90.000 -.2610 -.2570 -.2590  
135.000 -.2820 -.2710 -.2650  
180.000 -.0770 -.1830 -.2680  
225.000 -.2980 -.2770 -.2570  
270.000 -.2550 -.2500 -.2490

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.280  
X/LNP .250 .500 .750  
PHI  
.000 -.1800 -.1810  
90.000 -.1920 -.1850 -.1840  
135.000 -.1920 -.1830 -.1890  
180.000 -.1230 -.1820 -.1970  
225.000 -.2030 -.1930 -.1860  
270.000 -.1870 -.1840 -.1820

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.240  
X/LNP .250 .500 .750  
PHI  
.000 -.1810 -.1830  
90.000 -.1870 -.1840 -.1830  
135.000 -.2080 -.1870 -.1930  
180.000 -.1970 -.1870 -.1960  
225.000 -.2140 -.1950 -.1870  
270.000 -.1890 -.1870 -.1830

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230  
X/LNP .250 .500 .750  
PHI  
.000 -.1840 -.1860  
90.000 -.1880 -.1860 -.1860  
135.000 -.2250 -.1990 -.1940  
180.000 -.1810 -.1850 -.2010  
225.000 -.2190 -.1960 -.1960

(R00020)

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 O2A + S3 + 19 UPPER MPS NOZZLE

SECTION (1) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH (2) = 2.000 BETAT (3) = -4.200	X/LNP	.250	.500 .750
	PHI	270.000	-.1910 -.1890 -.1840
MACH (2) = 2.000 BETAT (4) = -.130	X/LNP	.250	.500 .750
	PHI	.000	-.1800 -.1820
		90.000	-.1870 -.1840 -.1820
		135.000	-.2010 -.1880 -.1960
		180.000	.0000 -.0470 -.1940
		225.000	-.2080 -.1960 -.1850
		270.000	-.1840 -.1820 -.1790
MACH (2) = 2.000 BETAT (5) = 3.950	X/LNP	.250	.500 .750
	PHI	.000	-.1870 -.1880
		90.000	-.1930 -.1910 -.1910
		135.000	-.2190 -.1990 -.1950
		180.000	-.0330 -.0490 -.2010
		225.000	-.2330 -.2310 -.1970
		270.000	-.1910 -.1890 -.1850
MACH (2) = 2.000 BETAT (6) = 5.990	X/LNP	.250	.500 .750
	PHI	.000	-.1810 -.1830
		90.000	-.1870 -.1860 -.1870
		135.000	-.2120 -.1990 -.1870
		180.000	-.0820 -.0130 -.1990
		225.000	-.2270 -.1840 -.1970
		270.000	-.1890 -.1870 -.1810
MACH (2) = 2.000 BETAT (7) = 6.040	X/LNP	.250	.500 .750
	PHI	.000	-.1930 -.1930
		90.000	-.1980 -.1960 -.1970
		135.000	-.2110 -.2110 -.2120
		180.000	-.0250 .0010 -.2100
		225.000	-.2150 -.1960 -.2050
		270.000	-.2100 -.1950 -.1890

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

PAGE 444

(RB0021) ( 24 MAY 75 )

AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

## REFERENCE DATA

STEP = 2.4210 90.FT. XGRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YGRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZGRP = .0000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.330

## DEPENDENT VARIABLE CP

X/LNP	.250	.500	.750
PHI			
.000	-.2550	-.2560	
90.000	-.2630	-.2570	-.2590
135.000	-.2680	-.2740	-.2650
180.000	-.1710	-.2410	-.2670
225.000	-.2790	-.2640	-.2620
270.000	-.2640	-.2600	-.2590

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.290

X/LNP	.250	.500	.750
PHI			
.000	-.2510	-.2530	
90.000	-.2570	-.2540	-.2540
135.000	-.2630	-.2710	-.2590
180.000	-.1110	-.1670	-.2690
225.000	-.2750	-.2720	-.2570
270.000	-.2590	-.2550	-.2540

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230

X/LNP	.250	.500	.750
PHI			
.000	-.2440	-.2470	
90.000	-.2520	-.2470	-.2460
135.000	-.2600	-.2660	-.2490
180.000	-.1760	-.1470	-.2580
225.000	-.2670	-.2630	-.2530
270.000	-.2530	-.2490	-.2480

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120

X/LNP	.250	.500	.750
PHI			
.000	-.2300	-.2320	
90.000	-.2350	-.2340	-.2330
135.000	-.2350	-.2440	-.2340
180.000	-.0930	-.2010	-.2340
225.000	-.2360	-.2360	-.2350
270.000	-.2390	-.2340	-.2310

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.900

X/LNP	.250	.500	.750
PHI			
.000	-.2380	-.2400	
90.000	-.2460	-.2430	-.2460
135.000	-.2590	-.2570	-.2470
180.000	-.1690	-.1470	-.2490
225.000	-.2660	-.2560	-.2430

## PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUDFLR = .000

(RBC021)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.980	X/LNP	.250	.500 .750
	PHI		
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.040	X/LNP	.250	.500 .750
	PHI		
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.110	X/LNP	.250	.500 .750
	PHI		
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.340	X/LNP	.250	.500 .750
	PHI		
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.280	X/LNP	.250	.500 .750
	PHI		
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210	X/LNP	.250	.500 .750
	PHI		

(R8C021)

AMES 97-707 1AS O2A + S3 + TS UPPER MPS NOZZLE

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210

X/LNP	.250	.500	.750
PHI			
270.000	-.1930	-.1900	-.1880

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.120

X/LNP	.250	.500	.750
PHI			
.000	-.1820	-.1830	
90.000	-.1830	-.1830	-.1830
135.000	-.1820	-.1840	-.1900
180.000	-.0240	-.0740	-.1820
225.000	-.2080	-.1970	-.1850
270.000	-.1840	-.1830	-.1810

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990

X/LNP	.250	.500	.750
PHI			
.000	-.1870	-.1950	
90.000	-.1950	-.1930	-.1930
135.000	-.2160	-.2040	-.1980
180.000	-.0550	-.0830	-.2030
225.000	-.2300	-.2810	-.2570
270.000	-.1940	-.1820	-.1060

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.020

X/LNP	.250	.500	.750
PHI			
.000	-.1878	-.1880	
90.000	-.1910	-.1910	-.1920
135.000	-.2060	-.2030	-.1930
180.000	-.1180	-.0730	-.2010
225.000	-.2280	-.1870	-.1980
270.000	-.1960	-.1920	-.1840

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.070

X/LNP	.250	.500	.750
PHI			
.000	-.1930	-.1940	
90.000	-.1990	-.1980	-.1990
135.000	-.2090	-.2110	-.2000
180.000	-.0490	-.0120	-.2095
225.000	-.2260	-.1940	-.2010
270.000	-.2030	-.1970	-.1890

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 OEA + S3 + T9 UPPER MPS NOZZLE

(RBC022) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUDDLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 26.5000 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .03000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE  
 MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.360

X/LNP	.250	.500	.750
PHI	-.2610	-.2630	
.000			
90.000	-.2670	-.2670	-.2670
135.000	-.2690	-.2690	-.2680
180.000	-.2710	-.2440	-.2720
225.000	-.2680	-.2660	-.2660
270.000	-.2710	-.2680	-.2640

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.310

X/LNP	.250	.500	.750
PHI	-.2520	-.2550	
.000			
90.000	-.2570	-.2570	-.2570
135.000	-.2630	-.2630	-.2610
180.000	-.2730	-.2660	-.2610
225.000	-.2630	-.2640	-.2570
270.000			

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230

X/LNP	.250	.500	.750
PHI	-.2450	-.2480	
.000			
90.000	-.2510	-.2480	-.2480
135.000	-.2590	-.2650	-.2530
180.000	-.2670	-.2510	-.2610
225.000	-.2650	-.2630	-.2530
270.000	-.2520	-.2510	-.2510

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110

X/LNP	.250	.500	.750
PHI	-.2320	-.2330	
.000			
90.000	-.2390	-.2370	-.2340
135.000	-.2360	-.2440	-.2370
180.000	-.2390	-.2220	-.2360
225.000	-.2390	-.2350	-.2350
270.000	-.2410	-.2350	-.2320

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

X/LNP	.250	.500	.750
PHI	-.2430	-.2450	
.000			
90.000	-.2510	-.2490	-.2490
135.000	-.2580	-.2610	-.2490
180.000	-.2650	-.1780	-.2530
225.000	-.2680	-.2590	-.2460
270.000			

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-787 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(R0022)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940		X/LNP	.250 .500 .750
		PHI	
		270.000	-.2490 -.2440 -.2420
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.060		X/LNP	.250 .500 .750
		PHI	
		.000	-.2510 -.2540
		90.000	-.2590 -.2570 -.2575
		135.000	-.2750 -.2670 -.2570
		180.000	-.1490 -.2130 -.2630
		225.000	-.2860 -.2870 -.2570
		270.000	-.2570 -.2530 -.2510
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.120		X/LNP	.250 .500 .750
		PHI	
		.000	-.2640 -.2650
		90.000	-.2730 -.2700 -.2690
		135.000	-.2880 -.2740 -.2710
		180.000	-.2000 -.1740 -.2750
		225.000	-.3060 -.2650 -.2680
		270.000	-.2670 -.2670 -.2650
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.330		X/LNP	.250 .500 .750
		PHI	
		.000	-.1820 -.1830
		90.000	-.1950 -.1860 -.1840
		135.000	-.1940 -.1770 -.1940
		180.000	-.1570 -.1630 -.1960
		225.000	-.2140 -.1910 -.1870
		270.000	-.1880 -.1860 -.1830
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.280		X/LNP	.250 .500 .750
		PHI	
		.000	-.1860 -.1880
		90.000	-.1980 -.1920 -.1890
		135.000	-.2140 -.1830 -.1980
		180.000	-.0860 -.0730 -.2110
		225.000	-.2030 -.2120 -.1910
		270.000	-.1910 -.1890 -.1860
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220		X/LNP	.250 .500 .750
		PHI	
		.000	-.1920 -.1920
		90.000	-.1980 -.1930 -.1930
		135.000	-.2110 -.2010 -.1990
		180.000	-.0560 -.0770 -.2030
		225.000	-.2080 -.2050 -.1980



(RBCD22)

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A9B  
 AWES 97-707 1A9 OEA + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220	X/LNP	.250	.500 .750
	PHI		
	270.000	-.1940	-.1930 -.1910
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.110	X/LNP	.250	.500 .750
	PHI		
	.000	-.1850	-.1860
	90.000	-.1880	-.1880
	135.000	-.1900	-.1880
	180.000	-.1930	-.1890
	225.000	-.1970	-.1890
	270.000	-.1890	-.1850
MACH ( 2 ) = 2.000 BETAT ( 5 ) = .000	X/LNP	.250	.500 .750
	PHI		
	.000	-.1890	-.1910
	90.000	-.1940	-.1930
	135.000	-.2120	-.2170
	180.000	-.1880	-.1780
	225.000	-.2140	-.2120
	270.000	-.1990	-.1930
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.050	X/LNP	.250	.500 .750
	PHI		
	.000	-.1840	-.1860
	90.000	-.1890	-.1880
	135.000	-.2130	-.2120
	180.000	-.1310	-.0160
	225.000	-.2210	-.1810
	270.000	-.1960	-.1890
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.110	X/LNP	.250	.500 .750
	PHI		
	.000	-.1890	-.1920
	90.000	-.1950	-.1940
	135.000	-.2160	-.2170
	180.000	-.1950	-.1170
	225.000	-.2210	-.1890
	270.000	-.2010	-.1930

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 08A + S3 + T9 UPPER MPS NOZZLE

# REFERENCE DATA

SREF = 2.4210 59. FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) MPS NOZZLE

### DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.400

X/LNP	PHI	.250	.500	.750
.000		-2178	-2160	
90.000		-2170	-2150	-2120
135.000		-2660	-2250	-2379
180.000		-0610	-0320	-2350
225.000		-2590	-2470	-2180
270.000		-2250	-2200	-2180

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.360

X/LNF	PHI	.250	.500	.750
.000		-2140	-2120	
90.000		-2160	-2120	-2130
135.000		-2660	-2240	-2360
180.000		-0130	-0460	-2330
225.000		-2480	-2480	-2159
270.000		-2200	-2160	-2120

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.290

X/LNF	PHI	.250	.500	.750
.000		-2260	-2240	
90.000		-2230	-2240	-2260
135.000		-2830	-2340	-2390
180.000		0120	-0380	-2420
225.000		-2570	-2580	-2300
270.000		-2340	-2290	-2270

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -2.170

X/LNF	PHI	.250	.500	.750
.000		-2410	-2410	
90.000		-2460	-2450	-2420
135.000		-2730	-2560	-2580
180.000		0980	-0400	-2550
225.000		-2650	-2530	-2550
270.000		-2450	-2450	-2420

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

X/LNF	PHI	.250	.500	.750
.000		-2180	-2160	
90.000		-2230	-2230	-2220
135.000		-2390	-2470	-2240
180.000		-0440	-0270	-2360
225.000		-2760	-2350	-2340

# PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUDDLR = .000

DATE 21 SEP 73 TASFULATED PRESSURE DATA - 1A98

(R80023)

AMES 97-707 1A9 O2A + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940  
X/LNP .250 .500 .750  
PHI  
270.000 -.2180 -.2180 -.2160

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 8.060  
X/LNP .250 .500 .750  
PHI  
.000 -.2150 -.2130  
90.000 -.2240 -.2190 -.2170  
135.000 -.2640 -.2440 -.2180  
180.000 -.0190 -.0190 -.2370  
225.000 -.2860 -.2300 -.2380  
270.000 -.2160 -.2160 -.2070

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.380  
X/LNP .250 .500 .750  
PHI  
.000 -.1480 -.1520  
90.000 -.1650 -.1540 -.1460  
135.000 -.0860 -.1680 -.1700  
180.000 .0890 -.1270 -.1680  
225.000 -.2090 -.1780 -.1670  
270.000 -.1610 -.1560 -.1510

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330  
X/LNP .250 .500 .750  
PHI  
.000 -.1630 -.1680  
90.000 -.1760 -.1710 -.1630  
135.000 -.1170 -.1940 -.1860  
180.000 .1030 -.1030 -.1770  
225.000 -.2110 -.1840 -.1890  
270.000 -.1750 -.1710 -.1650

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280  
X/LNP .250 .500 .750  
PHI  
.000 -.1580 -.1590  
90.000 -.1670 -.1650 -.1570  
135.000 -.1490 -.1780 -.1770  
180.000 .2070 .0330 -.1690  
225.000 -.1990 -.1680 -.1780  
270.000 -.1660 -.1640 -.1580

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170  
X/LNP .250 .500 .750  
PHI  
.000 -.1570 -.1590  
90.000 -.1610 -.1590 -.1590  
135.000 -.2260 -.1680 -.1790  
180.000 .1620 .0530 -.1670  
225.000 -.2030 -.1720 -.1740

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

(RBO023)

SECTION ( 1 ) MPS NOZZ ?

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170  
X/LNP .250 .500 .750  
PHI  
270.000 -.1630 -.1610 -.1570

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930  
X/LNP .250 .500 .750  
PHI  
.000 -.1630 -.1670  
90.000 -.1770 -.1730 -.1680  
135.000 -.2190 -.1870 -.1660  
180.000 .1270 .0420 -.1740  
225.000 -.1770 -.1950 -.1880  
270.000 -.1770 -.1720 -.1640

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980  
X/LNP .250 .500 .750  
PHI  
.000 -.1650 -.1680  
90.000 -.1800 -.1740 -.1700  
135.000 -.2260 -.2010 -.1880  
180.000 .1010 .0040 -.1760  
225.000 -.1330 -.2080 -.1970  
270.000 -.1870 -.1790 -.1750

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040  
X/LNP .250 .500 .750  
PHI  
.000 -.1580 -.1630  
90.000 -.1690 -.1660 -.1640  
135.000 -.2220 -.1920 -.1750  
180.000 .1240 -.0210 -.1790  
225.000 -.1160 -.1940 -.1940  
270.000 -.1850 -.1720 -.1630

(RBC024) ( 24 MAY 73 )

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5310 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE  
 MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.330

X/LNP	.250	.500	.750
PHI			
.000	-.2290	-.2310	
90.000	-.2290	-.2250	-.2310
135.000	-.2670	-.2380	-.2450
180.000	-.0980	-.0160	-.2900
225.000	-.2750	-.2540	-.2350
270.000	-.2410	-.2350	-.2330

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.290

X/LNP	.250	.500	.750
PHI			
.000	-.2270	-.2260	
90.000	-.2270	-.2240	-.2270
135.000	-.2750	-.2370	-.2430
180.000	-.0490	-.0520	-.2460
225.000	-.2630	-.2530	-.2310
270.000	-.2360	-.2310	-.2310

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

X/LNP	.250	.500	.750
PHI			
.000	-.2310	-.2310	
90.000	-.2310	-.2310	-.2320
135.000	-.2740	-.2380	-.2410
180.000	-.0480	-.0880	-.2430
225.000	-.2570	-.2540	-.2360
270.000	-.2380	-.2350	-.2350

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.150

X/LNP	.250	.500	.750
PHI			
.000	-.2420	-.2430	
90.000	-.2490	-.2460	-.2450
135.000	-.2650	-.2560	-.2560
180.000	-.0270	-.0780	-.2570
225.000	-.2640	-.2550	-.2510
270.000	-.2470	-.2450	-.2420

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

X/LNP	.250	.500	.750
PHI			
.000	-.2280	-.2260	
90.000	-.2380	-.2330	-.2340
135.000	-.2530	-.2510	-.2360
180.000	-.0860	-.0440	-.2420
225.000	-.2710	-.2420	-.2390

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

ANES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE (RB0024)

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940  
X/LNP .250 .500 .750  
PHI 270.000 -.2270 -.2260 -.2270

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.980  
X/LNP .250 .500 .750  
PHI .000 -.2270 -.2260  
90.000 -.2360 -.2310 -.2320  
135.000 -.2590 -.2610 -.2350  
180.000 -.0610 -.0690 -.2490  
225.000 -.2670 -.2470 -.2500  
270.000 -.2500 -.2270 -.2240

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.030  
X/LNP .250 .500 .750  
PHI .000 -.2230 -.2230  
90.000 -.2340 -.2310 -.2300  
135.000 -.2770 -.2430 -.2310  
180.000 -.0920 -.0090 -.2460  
225.000 -.2870 -.2410 -.2440  
270.000 -.2260 -.2230 -.2190

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.310  
X/LNP .250 .500 .750  
PHI .000 -.1590 -.1630  
90.000 -.1670 -.1590 -.1570  
135.000 -.1380 -.1480 -.1650  
180.000 .0270 .0620 -.1790  
225.000 -.1990 -.1940 -.1660  
270.000 -.1670 -.1650 -.1610

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -0.270  
X/LNP .250 .500 .750  
PHI .000 -.1670 -.1720  
90.000 -.1770 -.1710 -.1650  
135.000 -.1510 -.1740 -.1770  
180.000 .0490 .0400 -.1840  
225.000 -.2100 -.1820 -.1870  
270.000 -.1760 -.1740 -.1690

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230  
X/LNP .250 .500 .750  
PHI .000 -.1720 -.1750  
90.000 -.1800 -.1750 -.1720  
135.000 -.1840 -.1830 -.1820  
180.000 .1140 .1110 -.1840  
225.000 -.2180 -.1830 -.1890

DATE 21 SEP 77  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE  
 (R00024)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230	X/LNF	.250	.500 .750
	PHI		
	270.000	-.1780	-.1770 -.1720
	X/LNF	.250	.500 .750
	PHI		
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -3.160	.000	-.1700	-.1720
	90.000	-.1740	-.1720 -.1730
	135.000	-.2270	-.1810 -.1890
	180.000	.0940	.0280 -.1780
	225.000	-.2070	-.1860 -.1820
	270.000	-.1750	-.1730 -.1680
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.920	X/LNF	.250	.500 .750
	PHI		
	.000	-.1750	-.1790
	90.000	-.1860	-.1820 -.1800
	135.000	-.2250	-.1950 -.1940
	180.000	.0510	.0060 -.1860
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.960	225.000	-.2010	-.1970 -.1940
	270.000	-.1850	-.1810 -.1740
	X/LNF	.250	.500 .750
	PHI		
	.000	-.1720	-.1780
	90.000	-.1820	-.1780 -.1780
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.010	135.000	-.2260	-.1960 -.1890
	180.000	.0440	-.0230 -.1940
	225.000	-.1790	-.2010 -.1980
	270.000	-.1880	-.1800 -.1730
	X/LNF	.250	.500 .750
	PHI		
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.010	.000	-.1670	-.1710
	90.000	-.1760	-.1740 -.1730
	135.000	-.2140	-.2030 -.1770
	180.000	.0510	.0640 -.1880
	225.000	-.1580	-.1860 -.1920
	270.000	-.1800	-.1740 -.1630

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 Q2A + S3 + 19 UPPER MPS NOZZLE

(RB0025) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .000  
RUDDER = 15.000 ELEVON = .000  
RUDFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -0.320

PHI	X/LNP	.250	.500	.750
.000		-.2450	-.2480	
90.000		-.2490	-.2450	-.2480
135.000		-.2620	-.2670	-.2560
180.000		-.0850	-.0950	-.2650
225.000		-.2810	-.2670	-.2540
270.000		-.2560	-.2510	-.2510

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -0.270

PHI	X/LNP	.250	.500	.750
.000		-.2330	-.2360	
90.000		-.2360	-.2340	-.2370
135.000		-.2650	-.2500	-.2430
180.000		-.0080	-.0780	-.2540
225.000		-.2620	-.2620	-.2410
270.000		-.2420	-.2380	-.2380

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

PHI	X/LNP	.250	.500	.750
.000		-.2360	-.2380	
90.000		-.2370	-.2370	-.2390
135.000		-.2650	-.2460	-.2440
180.000		-.0660	-.1400	-.2480
225.000		-.2640	-.2490	-.2420
270.000		-.2440	-.2410	-.2410

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.130

PHI	X/LNP	.250	.500	.750
.000		-.2370	-.2370	
90.000		-.2420	-.2410	-.2410
135.000		-.2470	-.2540	-.2470
180.000		-.0380	-.1260	-.2310
225.000		-.2560	-.2540	-.2430
270.000		-.2420	-.2380	-.2370

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990

PHI	X/LNP	.250	.500	.750
.000		-.2370	-.2370	
90.000		-.2450	-.2420	-.2430
135.000		-.2610	-.2530	-.2440
180.000		-.1130	-.0880	-.2510
225.000		-.2720	-.2540	-.2430



(RBC025)

DATE 21 SEP 75  
 AMES 97-757 1A9 O2A + S3 + T9 UPPER MPS NOZZLE  
 ADJUSTED PRESSURE DATA - 1A9B

SECTION (1) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH (1) = 1.555 BETAT (5) = 3.950	X/LNP	.250	.500
	PHI		
	270.000	-.2360	-.2340
			-.2360
	X/LNP	.250	.500
	PHI		
MACH (3) = 1.555 BETAT (6) = 5.990	.000	-.2380	-.2400
	90.000	-.2480	-.2450
	135.000	-.2640	-.2730
	180.000	-.0510	-.0280
	225.000	-.2880	-.2610
	270.000	-.2420	-.2380
MACH (5) = 1.555 BETAT (7) = 8.040	X/LNP	.250	.500
	PHI		
	.000	-.2390	-.2410
	90.000	-.2500	-.2460
	135.000	-.2750	-.2630
	180.000	-.0660	-.0480
MACH (7) = 2.000 BETAT (1) = -8.290	225.000	-.2900	-.2590
	270.000	-.2410	-.2370
			-.2350
	X/LNP	.250	.500
	PHI		
	.000	-.1700	-.1720
MACH (2) = 2.000 BETAT (2) = -6.250	90.000	-.1730	-.1710
	135.000	-.1880	-.1790
	180.000	-.0390	-.0490
	225.000	-.1910	-.1850
	270.000	-.1780	-.1750
			-.1710
MACH (4) = 2.000 BETAT (3) = -4.210	X/LNP	.250	.500
	PHI		
	.000	-.1710	-.1740
	90.000	-.1770	-.1730
	135.000	-.1860	-.1780
	180.000	-.0120	-.0490
MACH (6) = 2.000 BETAT (4) = -2.190	225.000	-.2050	-.1960
	270.000	-.1790	-.1770
			-.1730
	X/LNP	.250	.500
	PHI		
	.000	-.1770	-.1790
MACH (8) = 2.000 BETAT (5) = -1.190	90.000	-.1830	-.1790
	135.000	-.2130	-.1890
	180.000	.0400	-.0280
	225.000	-.2190	-.1890
			-.1910
			-.1910

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 IAS OEA + S3 + T9 UPPER MPS NOZZLE

(RBC025)

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210

X/LNP PHI	.250	.500	.750
270.000	-.1830	-.1820	-.1780

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.140

X/LNP PHI	.250	.500	.750
.000	-.1760	-.1780	
90.000	-.1820	-.1810	-.1790
135.000	-.2210	-.1880	-.1940
180.000	-.0440	.0220	-.1880
225.000	-.2080	-.1920	-.1850
270.000	-.1810	-.1790	-.1760

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950

X/LNP PHI	.250	.500	.750
.000	-.1820	-.1840	
90.000	-.1890	-.1860	-.1830
135.000	-.2280	-.1940	-.1980
180.000	.0740	-.0230	-.1950
225.000	-.2170	-.2010	-.1960
270.000	-.1890	-.1850	-.1790

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 9.020

X/LNP PHI	.250	.500	.750
.000	-.1760	-.1780	
90.000	-.1840	-.1820	-.1830
135.000	-.1990	-.1980	-.1830
180.000	.0050	.0550	-.1980
225.000	-.2140	-.1890	-.1980
270.000	-.1910	-.1810	-.1740

45E 459

DATE 21 SEP 73

INSULATED PRESSURE DATA - 1A9B

AMES 97-707 1A9 CGA + S3 + T9 UPPER MES NOZZLE

(RSC026) ( 24 MAY 73 )

# REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 20.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.300

X/LNP	.250	.500	.750
PHI			
.000	-.2530	-.2540	
90.000	-.2570	-.2520	-.2550
135.000	-.2980	-.2790	-.2660
180.000	-.0790	-.2270	-.2640
225.000	-.2860	-.2670	-.2600
270.000	-.2590	-.2570	-.2570

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.260

X/LNP	.250	.500	.750
PHI			
.000	-.2430	-.2460	
90.000	-.2460	-.2440	-.2460
135.000	-.2730	-.2670	-.2500
180.000	-.0420	-.1580	-.2590
225.000	-.2720	-.2650	-.2510
270.000	-.2520	-.2470	-.2460

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220

X/LNP	.250	.500	.750
PHI			
.000	-.2420	-.2430	
90.000	-.2440	-.2440	-.2430
135.000	-.2610	-.2540	-.2480
180.000	-.0430	-.1490	-.2530
225.000	-.2630	-.2590	-.2480
270.000	-.2490	-.2450	-.2440

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120

X/LNP	.250	.500	.750
PHI			
.000	-.2320	-.2320	
90.000	-.2350	-.2340	-.2350
135.000	-.2320	-.2470	-.2370
180.000	-.0780	-.1710	-.2370
225.000	-.2410	-.2430	-.2350
270.000	-.2360	-.2340	-.2320

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.960

X/LNP	.250	.500	.750
PHI			
.000	-.2460	-.2480	
90.000	-.2550	-.2510	-.2520
135.000	-.2700	-.2670	-.2530
180.000	-.0700	-.1360	-.2580
225.000	-.2800	-.2620	-.2500

## PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUDEFLR = .000

DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A98

AMES 97-7U7 1A9 ORA + S3 + T9 UPPER MPS NOZZLE

(RBCD26)

## SECTION ( 1 ) MPS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.96U

X/LNP PHI	.25U	.5U	.75U
27U.00U	-.248U	-.246U	-.244U

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.01U

X/LNP PHI	.25U	.5U	.75U
.00U	-.253U	-.255U	
9U.00U	-.261U	-.259U	-.262U
135.00U	-.26U	-.277U	-.262U
18U.00U	-.087U	-.182U	-.269U
225.00U	-.294U	-.279U	-.26U
27U.00U	-.255U	-.252U	-.251U

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.09U

X/LNP PHI	.25U	.5U	.75U
.00U	-.251U	-.252U	
9U.00U	-.262U	-.259U	-.259U
135.00U	-.279U	-.268U	-.26U
18U.00U	-.103U	-.164U	-.267U
225.00U	-.295U	-.279U	-.259U
27U.00U	-.254U	-.249U	-.249U

MACH ( 2 ) = 2.00U BETAT ( 1 ) = -8.28U

X/LNP PHI	.25U	.5U	.75U
.00U	-.177U	-.178U	
9U.00U	-.189U	-.183U	-.182U
135.00U	-.19U	-.172U	-.185U
18U.00U	-.195U	-.183U	-.193U
225.00U	-.214U	-.188U	-.182U
27U.00U	-.186U	-.183U	-.179U

MACH ( 2 ) = 2.00U BETAT ( 2 ) = -6.23U

X/LNP PHI	.25U	.5U	.75U
.00U	-.18U	-.181U	
9U.00U	-.184U	-.182U	-.182U
135.00U	-.213U	-.184U	-.194U
18U.00U	-.169U	-.155U	-.196U
225.00U	-.217U	-.195U	-.186U
27U.00U	-.188U	-.185U	-.182U

MACH ( 2 ) = 2.00U BETAT ( 3 ) = -4.21U

X/LNP PHI	.25U	.5U	.75U
.00U	-.183U	-.184U	
9U.00U	-.186U	-.185U	-.185U
135.00U	-.221U	-.195U	-.192U
18U.00U	-.149U	-.146U	-.198U
225.00U	-.211U	-.198U	-.193U

(RB0026)

SECTION ( 1 ) MPS NOZZLE			DEPENDENT VARIABLE CP		
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.200		X/LNF PHI	.250	.500
			270.000	-.1890	-.1840
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.120		X/LNF PHI	.250	.500
			.000	-.1820	-.1830
			90.000	-.1860	-.1840
			135.000	-.2030	-.1870
			180.000	.0340	-.0580
			225.000	-.2080	-.1970
			270.000	-.1850	-.1830
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.980		X/LNF PHI	.250	.500
			.000	-.1940	-.1950
			90.000	-.2000	-.1980
			135.000	-.2180	-.2110
			180.000	-.0230	-.1130
			225.000	-.2390	-.2080
			270.000	-.1980	-.1970
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.680		X/LNF PHI	.250	.500
			.000	-.1850	-.1870
			90.000	-.1910	-.1910
			135.000	-.2130	-.2050
			180.000	-.0750	-.0230
			225.000	-.2290	-.1960
			270.000	-.1940	-.1940
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.030		X/LNF PHI	.250	.500
			.000	-.1910	-.1930
			90.000	-.1980	-.1970
			135.000	-.2130	-.2110
			180.000	-.0300	-.0190
			225.000	-.2140	-.1990
			270.000	-.2030	-.1980

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(R80027) ( 24 MAY 73 )

AMES 97-757 1A9 02A + S3 + T9 UPPER MPS NOZZLE

REFERENCE DATA

SREF = 2.4210 90.FT. XMRP = 20.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE	MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.330	X/LNP	PHI	.250	.500	.750
			.000		-.2600	-.2610	-.2630
			90.000		-.2640	-.2610	-.2630
			135.000		-.2680	-.2700	-.2710
			180.000		-.1650	-.2410	-.2750
			225.000		-.2890	-.2730	-.2670
			270.000		-.2680	-.2650	-.2640
			X/LNP	.250	.500	.750	
			PHI				
			.000		-.2520	-.2540	
			90.000		-.2570	-.2550	-.2560
			135.000		-.2780	-.2690	-.2680
			180.000		-.1080	-.1440	-.2690
			225.000		-.2800	-.2770	-.2570
			270.000		-.2610	-.2570	-.2550
			X/LNP	.250	.500	.750	
			PHI				
			.000		-.2420	-.2450	
			90.000		-.2450	-.2430	-.2440
			135.000		-.2610	-.2610	-.2570
			180.000		-.1060	-.1420	-.2580
			225.000		-.2670	-.2590	-.2570
			270.000		-.2500	-.2480	-.2470
			X/LNP	.250	.500	.750	
			PHI				
			.000		-.2340	-.2360	
			90.000		-.2410	-.2410	-.2370
			135.000		-.2360	-.2530	-.2390
			180.000		-.1090	-.1930	-.2470
			225.000		-.2440	-.2450	-.2470
			270.000		-.2420	-.2410	-.2370
			X/LNP	.250	.500	.750	
			PHI				
			.000		-.2470	-.2490	
			90.000		-.2560	-.2540	-.2550
			135.000		-.2680	-.2720	-.2560
			180.000		-.1070	-.1320	-.2610
			225.000		-.2770	-.2660	-.2540
			X/LNP	.250	.500	.750	
			PHI				
			.000		-.2470	-.2490	
			90.000		-.2560	-.2540	-.2550
			135.000		-.2680	-.2720	-.2560
			180.000		-.1070	-.1320	-.2610
			225.000		-.2770	-.2660	-.2540

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990

(R80027)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A99  
AMES 97-703 1A9 O2A + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990	X/LNF	.250	.500 .750
	PHI		
	270.000	-.2510	-.2480
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.030	X/LNF	.250	.500 .750
	PHI		
	.000	-.2530	-.2550
	90.000	-.2620	-.2580
	135.000	-.2780	-.2750
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.090	X/LNF	.250	.500 .750
	PHI		
	.000	-.2550	-.2570
	90.000	-.2660	-.2630
	135.000	-.2810	-.2680
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.300	X/LNF	.250	.500 .750
	PHI		
	.000	-.1800	-.1820
	90.000	-.1960	-.1870
	135.000	-.1920	-.1760
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250	X/LNF	.250	.500 .750
	PHI		
	.000	-.1840	-.1850
	90.000	-.1930	-.1880
	135.000	-.1970	-.1980
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200	X/LNF	.250	.500 .750
	PHI		
	.000	-.1860	-.1870
	90.000	-.1880	-.1880
	135.000	-.2250	-.1970

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(R50027)

AMES 97-707 1A9 02A + S3 + T9 UPPER MPS NOZZLE

SECTION ( 1 ) MPS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200

X/LNP	.250	.500	.750
PHI			
270.000	-.1910	-.1890	-.1850

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.120

X/LNP	.250	.500	.750
PHI			
.000	-.1840	-.1850	
90.000	-.1870	-.1870	-.1860
135.000	-.1980	-.1890	-.1970
180.000	-.0040	-.0890	-.1960
225.000	-.2140	-.2030	-.1880
270.000	-.1870	-.1870	-.1830

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.970

X/LNP	.250	.500	.750
PHI			
.000	-.1940	-.1960	
90.000	-.2020	-.1990	-.2010
135.000	-.2200	-.2130	-.2120
180.000	-.0410	-.1300	-.2180
225.000	-.2380	-.2190	-.2180
270.000	-.2010	-.1990	-.1940

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.030

X/LNP	.250	.500	.750
PHI			
.000	-.1920	-.1920	
90.000	-.1960	-.1960	-.1960
135.000	-.2160	-.2100	-.1980
180.000	-.1050	-.1080	-.2070
225.000	-.2310	-.2000	-.2160
270.000	-.1990	-.1950	-.1890

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.070

X/LNP	.250	.500	.750
PHI			
.000	-.1950	-.1970	
90.000	-.2010	-.2000	-.2010
135.000	-.2140	-.2140	-.2010
180.000	-.0560	-.1060	-.2130
225.000	-.2230	-.1980	-.2070
270.000	-.2050	-.2000	-.1920



DATE 21 SEP 73

TABULATED PRESSURE DATA - 1498

AMES 97-707 1A9 O2A + S3 + T9 UPPER MPS NOZZLE

(RBC028) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

PARAMETRIC DATA

ALPHAT = 8.0000 ORBINC = .0000  
 RUDDER = 15.0000 ELEVON = .0000  
 RUDFLR = .0000

DEPENDENT VARIABLE CP

SECTION ( 1 ) MPS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.350

X/LNP	.250	.500	.750
PHI			
.000	-.2650	-.2670	
90.000	-.2740	-.2710	-.2710
135.000	-.2920	-.2740	-.2720
180.000	-.2070	-.2500	-.2770
225.000	-.2920	-.2730	-.2720
270.000	-.2740	-.2710	-.2680

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.300

X/LNP	.250	.500	.750
PHI			
.000	-.2540	-.2570	
90.000	-.2610	-.2590	-.2570
135.000	-.2720	-.2630	-.2610
180.000	-.1220	-.1740	-.2700
225.000	-.2760	-.2670	-.2610
270.000	-.2640	-.2600	-.2590

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230

X/LNP	.250	.500	.750
PHI			
.000	-.2440	-.2470	
90.000	-.2500	-.2470	-.2470
135.000	-.2500	-.2640	-.2560
180.000	-.1670	-.1540	-.2610
225.000	-.2660	-.2630	-.2540
270.000	-.2520	-.2500	-.2500

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110

X/LNP	.250	.500	.750
PHI			
.000	-.2360	-.2360	
90.000	-.2420	-.2390	-.2390
135.000	-.2380	-.2500	-.2410
180.000	-.1100	-.2170	-.2410
225.000	-.2450	-.2420	-.2390
270.000	-.2430	-.2390	-.2380

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 4.000

X/LNP	.250	.500	.750
PHI			
.000	-.2500	-.2520	
90.000	-.2590	-.2570	-.2580
135.000	-.2650	-.2730	-.2590
180.000	-.1010	-.1440	-.2630
225.000	-.2780	-.2680	-.2530

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 C8A + S3 + T9 UPPER MPS NOZZLE

(RBC028)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555    BETAT ( 5 ) = 4.000	X/LNP	.250	.500
	PHI		
	270.000	-.2540	-.2510
			-.2490
	X/LNP	.250	.500
	PHI		
MACH ( 1 ) = 1.555    BETAT ( 6 ) = 6.000	.000	-.2550	-.2580
	90.000	-.2650	-.2630
	135.000	-.2830	-.2720
	180.000	-.1580	-.1360
	225.000	-.2870	-.2670
	270.000	-.2610	-.2590
MACH ( 1 ) = 1.555    BETAT ( 7 ) = 8.130	X/LNP	.250	.500
	PHI		
	.000	-.2600	-.2590
	90.000	-.2700	-.2650
	135.000	-.2840	-.2680
	180.000	-.2040	-.1570
MACH ( 2 ) = 2.000    BETAT ( 1 ) = -8.320	225.000	-.3700	-.2630
	270.000	-.2640	-.2610
		-.2590	
	X/LNP	.250	.500
	PHI		
	.000	-.1790	-.1810
MACH ( 2 ) = 2.000    BETAT ( 2 ) = -6.260	90.000	-.1940	-.1850
	135.000	-.1920	-.1690
	180.000	-.1480	-.1670
	225.000	-.2160	-.1880
	270.000	-.1860	-.1850
		-.1810	
MACH ( 2 ) = 2.000    BETAT ( 3 ) = -4.210	X/LNP	.250	.500
	PHI		
	.000	-.1860	-.1870
	90.000	-.1990	-.1900
	135.000	-.2100	-.1800
	180.000	-.1800	-.0680
MACH ( 2 ) = 2.000    BETAT ( 3 ) = -4.210	225.000	-.2130	-.2020
	270.000	-.1940	-.1880
		-.1860	-.1860
	X/LNP	.250	.500
	PHI		
	.000	-.1860	-.1880
MACH ( 2 ) = 2.000    BETAT ( 3 ) = -4.210	90.000	-.1930	-.1890
	135.000	-.1950	-.1980
	180.000	-.1410	-.1750
	225.000	-.2070	-.2040
		-.2040	-.1940

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 O2A + S3 + T9 UPPER MPS NOZZLE

(RB0228)

SECTION ( 1 ) MPS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210	X/LNP	.250	.500 .750
	PHI		
	270.000	-.1910	-.1890 -.1860
	X/LNP	.250	.500 .750
	PHI		
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.110	.000	-.1880	-.1900
	90.000	-.1900	-.1890 -.1940
	135.000	-.2140	-.1870 -.1990
	180.000	-.3150	-.1950 -.2020
	225.000	-.2140	-.2020 -.1920
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990	270.000	-.1920	-.1910 -.1870
	X/LNP	.250	.500 .750
	PHI		
	.000	-.1990	-.2140
	90.000	-.2140	-.2020 -.2030
MACH ( 2 ) = 3.000 BETAT ( 6 ) = 6.090	135.000	-.2220	-.2150 -.2070
	180.000	-.1080	-.1080 -.2110
	225.000	-.2210	-.2140 -.2130
	270.000	-.2070	-.2020 -.1970
	X/LNP	.250	.500 .750
MACH ( 2 ) = 3.000 BETAT ( 7 ) = 8.110	PHI		
	.000	-.1890	-.1910
	90.000	-.1950	-.1940 -.1940
	135.000	-.2130	-.2020 -.1930
	180.000	-.1190	-.1420 -.2090
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.110	225.000	-.2250	-.1950 -.2040
	270.000	-.2020	-.1940 -.1880
	X/LNP	.250	.500 .750
	PHI		
	.000	-.1920	-.1930
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.110	90.000	-.1970	-.1970 -.1980
	135.000	-.2070	-.2100 -.1990
	180.000	-.1090	-.1480 -.2060
	225.000	-.2210	-.1940 -.2010
	270.000	-.2040	-.1940 -.1880

DATE 21 SEP 75

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 OMS NOZZLE

(RBOE01) ( 24 MAY 75 )

REFERENCE DATA

SREP = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0350 SCALE

PARAMETRIC DATA

BETAT = .000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE

MACH ( 1 ) = 1.555	ALPHAT( 1 ) = -6.400	X/LNM	PHI	200	.400
		135.000		.1380	
		180.000		.3560	-.0680
		225.000		-.2590	
MACH ( 1 ) = 1.555	ALPHAT( 2 ) = -6.330	X/LNM	PHI	200	.400
		135.000		.0720	
		180.000		.2790	-.1020
		225.000		-.2630	
MACH ( 1 ) = 1.555	ALPHAT( 3 ) = -4.250	X/LNM	PHI	200	.400
		135.000		.0570	
		180.000		.2040	-.1380
		225.000		-.2610	
MACH ( 1 ) = 1.555	ALPHAT( 4 ) = -2.180	X/LNM	PHI	200	.400
		135.000		.0460	
		180.000		.1660	-.1540
		225.000		-.2620	
MACH ( 1 ) = 1.555	ALPHAT( 5 ) = -.120	X/LNM	PHI	200	.400
		135.000		.0310	
		180.000		.1220	-.1660
		225.000		-.2630	
MACH ( 1 ) = 1.555	ALPHAT( 6 ) = 1.950	X/LNM	PHI	200	.400
		135.000		-.1490	
		180.000		.0950	-.1840
		225.000		-.2560	
MACH ( 1 ) = 1.555	ALPHAT( 7 ) = 4.010	X/LNM	PHI	200	.400
		135.000		-.0430	
		180.000		-.1460	-.2080
		225.000		-.2510	

PRESSURE DATA - 1A9B

SECTION ( 1 ) OWS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555	ALPHAT( 8 ) = 6.060	X/LNW PHI	.200 -1.0830
		135.000	-1.0830
		180.000	-1.0390
		225.000	-1.2370
MACH ( 1 ) = 1.555	ALPHAT( 9 ) = 8.130	X/LNW PHI	.200 -1.0800
		135.000	-1.0800
		180.000	-1.0740
		225.000	-1.2480
MACH ( 2 ) = 2.000	ALPHAT( 1 ) = -8.360	X/LNW PHI	.200 .3910
		135.000	.3910
		180.000	.4350
		225.000	-1.0630
MACH ( 2 ) = 2.000	ALPHAT( 2 ) = -6.310	X/LNW PHI	.200 .3650
		135.000	.3650
		180.000	.4340
		225.000	-1.0880
MACH ( 2 ) = 2.000	ALPHAT( 3 ) = -4.250	X/LNW PHI	.200 .3460
		135.000	.3460
		180.000	.3980
		225.000	-1.1070
MACH ( 2 ) = 2.000	ALPHAT( 4 ) = -2.210	X/LNW PHI	.200 .3280
		135.000	.3280
		180.000	.3660
		225.000	-1.1290
MACH ( 2 ) = 2.000	ALPHAT( 5 ) = -.160	X/LNW PHI	.200 .2960
		135.000	.2960
		180.000	.3120
		225.000	-1.1320
MACH ( 2 ) = 2.000	ALPHAT( 6 ) = 1.890	X/LNW PHI	.200 .2430
		135.000	.2430
		180.000	.2540
		225.000	-1.1420

(RBOCU1)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A98  
 AMES 97-757 1A9 OSA + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000    ALPHAT( 7 ) = 3.930	X/LNM	.200	.400
	PHI		
	135.000	.1680	
	180.000	.1770	.0670
	225.000	-.1510	
MACH ( 2 ) = 2.000    ALPHAT( 8 ) = 5.980	X/LNM	.200	.400
	PHI		
	135.000	.1490	
	180.000	.1330	.0390
	225.000	-.1470	
MACH ( 2 ) = 2.000    ALPHAT( 9 ) = 8.020	X/LNM	.200	.400
	PHI		
	135.000	.2030	
	180.000	.1470	.0170
	225.000	-.1460	

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A9B

PAGE 471

AMES 97-717 1A9 02A + S3 + T9 0MS NOZZLE

(RBOC02) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHAT = 8.0000 ORBINC = .5000  
 RUDDER = .0000 ELEVON = .0000  
 RUDDLR = .0000

## SECTION ( 1 ) 0MS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.140	X/LNM	.200	.400
		PHI		
		135.000	.1450	
		180.000	.3090	-.0490
		225.000	-.2580	

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.100

X/LNM	.200	.400
PHI		
135.000	.0910	
180.000	.2770	-.0960
225.000	-.2680	

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050

X/LNM	.200	.400
PHI		
135.000	.0620	
180.000	.1590	-.1430
225.000	-.2630	

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.110

X/LNM	.200	.400
PHI		
135.000	-.0770	
180.000	-.1840	-.2130
225.000	-.2780	

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.140

X/LNM	.200	.400
PHI		
135.000	-.1090	
180.000	-.1230	-.2490
225.000	-.2790	

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.190

X/LNM	.200	.400
PHI		
135.000	-.2480	
180.000	-.2470	-.2680
225.000	-.2730	

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.320

X/LNM	.200	.400
PHI		
135.000	-.1390	
180.000	.0100	-.1020
225.000	-.1990	

AMES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

(RBC:1:2)

## SECTION ( 1 ) OMS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.270

X/LNM	.200	.400
PHI		
135.000	-.0080	
180.000	.0930	-.0240
225.000	-.0940	

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210

X/LNM	.200	.400
PHI		
135.000	.0570	
180.000	.2230	.1780
225.000	-.0720	

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.990

X/LNM	.200	.400
PHI		
135.000	.0560	
180.000	.1460	-.0780
225.000	-.1920	

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 6.060

X/LNM	.200	.400
PHI		
135.000	-.0230	
180.000	.0480	-.1430
225.000	-.2040	

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.120

X/LNM	.200	.400
PHI		
135.000	.1340	
180.000	-.0580	-.1740
225.000	-.2160	



DATE 21 SEP 72

TABULATED PRESSURE DATA - 1A98  
AMES 97-757 1A9 ORA + S3 + T9 QMS NOZZLE

RBOEUS: / 24 MAY 73

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 28.5300 INCHES  
 LREF = 39.8480 INCHES YREF = .1660 INCHES  
 BREF = 39.8490 INCHES ZREF = .1000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) QMS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.120  
 X/LNM .200 .400  
 PHI  
 135.000 .2560  
 180.000 .3700 .0960  
 225.000 -.2030

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.170  
 X/LNM .200 .400  
 PHI  
 135.000 .2140  
 180.000 .3010 -.0290  
 225.000 -.2480

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.090  
 X/LNM .200 .400  
 PHI  
 135.000 .1450  
 180.000 .1650 -.1270  
 225.000 -.2640

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.080  
 X/LNM .200 .400  
 PHI  
 135.000 -.1640  
 180.000 .0260 -.2030  
 225.000 -.2710

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.110  
 X/LNM .200 .400  
 PHI  
 135.000 -.1920  
 180.000 -.0880 -.2430  
 225.000 -.2750

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.140  
 X/LNM .200 .400  
 PHI  
 135.000 -.2470  
 180.000 -.2530 -.2630  
 225.000 -.2690

MACH ( 2 ) = 2.140 BETAT ( 1 ) = -8.300  
 X/LNM .200 .400  
 PHI  
 135.000 -.1600  
 180.000 .0110 -.10790  
 225.000 .0320

## PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUDDLE = .000

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A9B  
 AMES 97-757 1A9 02A + S3 + T9 OMS NOZZLE

(RECEIVED)

SECTION ( 1 ) OMS NOZZLE  
 DEFENDANT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.290  
 X/LNM .200 .400  
 PHI  
 135.000 .0310  
 180.000 .0640  
 225.000 .0360

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200  
 X/LNM .200 .400  
 PHI  
 135.000 .1410  
 180.000 .2690  
 225.000 -.0520

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.970  
 X/LNM .200 .400  
 PHI  
 135.000 .0070  
 180.000 .1710  
 225.000 -.0790

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 6.030  
 X/LNM .200 .400  
 PHI  
 135.000 -.0110  
 180.000 .0550  
 225.000 -.1280

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.080  
 X/LNM .200 .400  
 PHI  
 135.000 .0580  
 180.000 -.1190  
 225.000 -.1960

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A9B

AMES 97-707 1A9 OEA + S3 + T9 OMS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ. FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0400 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0420 INCHES  
 SCALE = .0300 SCALE

SECTION ( 1 ) OMS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.080	X/LNM	PHI
		.200	.400
		135.000	.3690
		180.000	.4130
		225.000	-.2020
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -5.070	X/LNM	PHI
		.200	.400
		135.000	.2690
		180.000	.3150
		225.000	-.2460
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.060	X/LNM	PHI
		.200	.400
		135.000	.1840
		180.000	.1870
		225.000	-.2660
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.060	X/LNM	PHI
		.200	.400
		135.000	-.0680
		180.000	.0170
		225.000	-.2720
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.080	X/LNM	PHI
		.200	.400
		135.000	-.1880
		180.000	-.0570
		225.000	-.2720
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.100	X/LNM	PHI
		.200	.400
		135.000	-.2260
		180.000	-.2030
		225.000	-.2670
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.270	X/LNM	PHI
		.200	.400
		135.000	.0840
		180.000	.0180
		225.000	.0960

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUDDLR = .000

(RBCU4) ( 24 MAY 73 )

(R90E1A)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A9B  
 AMES 97-757 1A9 O2A + S3 + T9 OMS NOZZLE

## SECTION ( 1 ) OMS NOZZLE      DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000    BETAT ( 2 ) = -6.240      X/LNM    .200    .400  
 PHI  
 135.000    .1310  
 180.000    .1960    .5100  
 225.000    .1430

MACH ( 2 ) = 2.000    BETAT ( 3 ) = -4.200      X/LNM    .200    .400  
 PHI  
 135.000    .0710  
 180.000    .3110    .3910  
 225.000    -.0370

MACH ( 2 ) = 2.000    BETAT ( 4 ) = 3.950      X/LNM    .200    .400  
 PHI  
 135.000    .0240  
 180.000    .1970    -.0730  
 225.000    -.1840

MACH ( 2 ) = 2.000    BETAT ( 5 ) = 5.990      X/LNM    .200    .400  
 PHI  
 135.000    -.0400  
 180.000    .0740    -.1200  
 225.000    -.2040

MACH ( 2 ) = 2.000    BETAT ( 6 ) = 8.030      X/LNM    .200    .400  
 PHI  
 135.000    -.1670  
 180.000    -.0500    -.1770  
 225.000    -.2070

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBOEUS) ( 24 MAY 73 )

AMES 97-717 1A9 02A + S3 + T9 OMS NOZZLE

# REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 28.5300 INCHES  
 LREF = 39.8490 INCHES YREF = 1.0000 INCHES  
 BREF = 39.8490 INCHES ZREF = 1.0000 INCHES  
 SCALE = 1.0000 SCALE

# PARAMETRIC DATA

ALPHAT = 2.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUDDER = .000

# DEPENDENT VARIABLE CP

## SECTION ( 1 ) OMS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.100 X/LNM .200 .400  
 PHI  
 135.000 .4350  
 180.000 .4350 .2750  
 225.000 -.1720

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070 X/LNM .200 .400  
 PHI  
 135.000 .3800  
 180.000 .3710 .0460  
 225.000 -.2380

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050 X/LNM .200 .400  
 PHI  
 135.000 .2510  
 180.000 .2550 -.1060  
 225.000 -.2560

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.050 X/LNM .200 .400  
 PHI  
 135.000 -.0770  
 180.000 .0290 -.2080  
 225.000 -.2720

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.070 X/LNM .200 .400  
 PHI  
 135.000 -.1980  
 180.000 -.0430 -.2300  
 225.000 -.2650

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.090 X/LNM .200 .400  
 PHI  
 135.000 -.2420  
 180.000 -.1860 -.2620  
 225.000 -.2640

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.280 X/LNM .200 .400  
 PHI  
 135.000 .1160  
 180.000 .1370 .3760  
 225.000 .0800

DATE 21 SEP 79 TABULATED PRESSURE DATA - 1A98

(500E15)

AMES 97-737 1A9 02A + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	X/LNM PHI	.200	.400
		135.000	.1970	
		180.000	.2710	.5650
		225.000	.0400	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.140	X/LNM PHI	.200	.400
		135.000	.2880	
		180.000	.3370	.4210
		225.000	-.0360	
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.940	X/LNM PHI	.200	.400
		135.000	.0080	
		180.000	.2110	-.0710
		225.000	-.1790	
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.980	X/LNM PHI	.200	.400
		135.000	-.0630	
		180.000	.0640	-.1210
		225.000	-.2000	
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.020	X/LNM PHI	.200	.400
		135.000	-.1260	
		180.000	-.0420	-.1690
		225.000	-.2030	

AWES 97-707 1A9 02A + S3 + T9 QWS NOZZLE

(REVISED) 24 MAY 73

## REFERENCE DATA

SREF = 2.4210 SQ. FT. XGRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YGRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZGRP = .0000 INCHES  
 SCALE = .0010 SCALE

## PARAMETRIC DATA

ALPHAT = .0000 ORBINC = .5000  
 RUDDER = .0000 ELEVON = .0000  
 RUDDLR = .0000

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) QWS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.1000 X/LNM .200 .400  
 PHI  
 135.000 .5400  
 180.000 .4620 .3190  
 225.000 -.1700

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.0800 X/LNM .200 .400  
 PHI  
 135.000 .4710  
 180.000 .4130 .1300  
 225.000 -.2200

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.0600 X/LNM .200 .400  
 PHI  
 135.000 .3870  
 180.000 .3350 -.0370  
 225.000 -.2560

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.0500 X/LNM .200 .400  
 PHI  
 135.000 -.0880  
 180.000 .0340 -.2070  
 225.000 -.2700

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.0600 X/LNM .200 .400  
 PHI  
 135.000 -.2090  
 180.000 -.0420 -.2310  
 225.000 -.2620

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.0800 X/LNM .200 .400  
 PHI  
 135.000 -.2490  
 180.000 -.1700 -.2550  
 225.000 -.2550

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -9.2900 X/LNM .200 .400  
 PHI  
 135.000 .2180  
 180.000 .2120 .4280  
 225.000 .0740

(RBOE)6)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 ORA + S3 + T9 CWS NOZZLE

SECTION ( 1 ) CWS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	X/LNM	.200 .400
		PHI	
		135.000	.2770
		180.000	.3500
		225.000	.0310
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -.130	X/LNM	.200 .400
		PHI	
		135.000	.2780
		180.000	.3240
		225.000	-.1430
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.950	X/LNM	.200 .400
		PHI	
		135.000	-.1240
		180.000	.2070
		225.000	-.1720
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.980	X/LNM	.200 .400
		PHI	
		135.000	-.1630
		180.000	.0610
		225.000	-.1160



DATE 21 SEP 73

ADULTATED PRESSURE DATA - 1A9B

AXES 97-71.7 1A9 OCA + S3 + T9 OMS NOZZLE

(RBC017) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -2.1000  
 RUDDER = .0000  
 RUDFLR = .0000  
 ORBIAC = .5000  
 ELEVON = .1000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.110  
 X/LNM .200 .400  
 PHI  
 135.000 .6220  
 180.000 .4950  
 225.000 -.1460

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.060  
 X/LNM .200 .400  
 PHI  
 135.000 .5740  
 180.000 .4670  
 225.000 -.1940

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.070  
 X/LNM .200 .400  
 PHI  
 135.000 .4310  
 180.000 .3910  
 225.000 -.2500

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.040  
 X/LNM .200 .400  
 PHI  
 135.000 -.1690  
 180.000 .0420  
 225.000 -.2640

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.060  
 X/LNM .200 .400  
 PHI  
 135.000 -.2080  
 180.000 -.0310  
 225.000 -.2550

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.080  
 X/LNM .200 .400  
 PHI  
 135.000 -.2370  
 180.000 -.1990  
 225.000 -.2430

MACH ( 2 ) = 2.1400 BETAT ( 1 ) = -8.310  
 X/LNM .200 .400  
 PHI  
 135.000 .2950  
 180.000 .3140  
 225.000 .1680

(RBOCU7)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000    BETAT ( 2 ) = -6.260	X/LNM	.200	.400
	PHI		
	135.000	.3320	
	180.000	.4160	.6200
	225.000	.0300	
MACH ( 2 ) = 2.000    BETAT ( 3 ) = -4.230	X/LNM	.200	.400
	PHI		
	135.000	.4380	
	180.000	.3970	.6320
	225.000	.0290	
MACH ( 2 ) = 2.000    BETAT ( 4 ) = 3.940	X/LNM	.200	.400
	PHI		
	135.000	-.0390	
	180.000	.2050	-.0560
	225.000	-.1670	
MACH ( 2 ) = 2.000    BETAT ( 5 ) = 5.970	X/LNM	.200	.400
	PHI		
	135.000	-.1150	
	180.000	.1000	-.0990
	225.000	-.1860	
MACH ( 2 ) = 2.000    BETAT ( 6 ) = 8.000	X/LNM	.200	.400
	PHI		
	135.000	-.1230	
	180.000	.0080	-.1340
	225.000	-.1960	

(RBOEUB) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUOPLR = .000

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE	X/LNM	PHI	CP
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.130	X/LNM	PHI	.400
	135.000	.7050	
	180.000	.4980	.6290
	225.000	-.0810	
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.150	X/LNM	PHI	.400
	135.000	.6810	
	180.000	.5270	.4480
	225.000	-.1340	
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.070	X/LNM	PHI	.400
	135.000	.4810	
	180.000	.4380	.0580
	225.000	-.2370	
MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.030	X/LNM	PHI	.400
	135.000	-.1520	
	180.000	.0200	-.2040
	225.000	-.2540	
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.050	X/LNM	PHI	.400
	135.000	-.2080	
	180.000	-.0280	-.2150
	225.000	-.2440	
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.070	X/LNM	PHI	.400
	135.000	-.2300	
	180.000	-.1640	-.2340
	225.000	-.2390	
MACH ( 2 ) = 2.020 BETAT ( 1 ) = -8.310	X/LNM	PHI	.400
	135.000	.3570	
	180.000	.4090	.5550
	225.000	.0540	

(RBOELH)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 O2A + S3 + 79 OHS NOZZLE

## SECTION ( 1 ) OHS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	X/LNM	.200	.400
		PHI		
		135.000	.4220	
		180.000	.4630	.6680
		225.000	.0330	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.230	X/LNM	.200	.400
		PHI		
		135.000	.5120	
		180.000	.4140	.6980
		225.000	.0410	
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.920	X/LNM	.200	.400
		PHI		
		135.000	-.0220	
		180.000	.2440	-.0140
		225.000	-.1590	
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.960	X/LNM	.200	.400
		PHI		
		135.000	-.1100	
		180.000	.1410	-.0740
		225.000	-.1830	
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.010	X/LNM	.200	.400
		PHI		
		135.000	-.1110	
		180.000	.0470	-.1090
		225.000	-.1960	

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 Q2A + S3 + T9 QMS NOZZLE

RECEIVED 12 MAY 73

PARAMETRIC DATA

ALPHA = -6.000 ORBITAL = .500  
 RUDER = .000 ELEVON = .000  
 RUDDER = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 35.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

SECTION ( 1 ) QMS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.160	X/LNM	PHI	.200	.400
		135.000	.7770		.7450
		180.000	.5090		
		225.000	-.0580		
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.170	X/LNM	PHI	.200	.400
		135.000	.7710		
		180.000	.5490		.5750
		225.000	-.1060		
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.180	X/LNM	PHI	.200	.400
		135.000	.6560		
		180.000	.5270		.2160
		225.000	-.1920		
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 3.640	X/LNM	PHI	.200	.400
		135.000	-.1920		
		180.000	-.0390		-.2220
		225.000	-.2420		
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 5.690	X/LNM	PHI	.200	.400
		135.000	-.1740		
		180.000	.0260		-.1990
		225.000	-.2460		
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 7.740	X/LNM	PHI	.200	.400
		135.000	-.2220		
		180.000	-.0920		-.2180
		225.000	-.2320		
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.340	X/LNM	PHI	.200	.400
		135.000	.4110		
		180.000	.5270		.6510
		225.000	.1640		

AMES 97-757 1A9 O2A + S3 + T9 OMS NOZZLE

(RBC19)

## SECTION ( 1 ) OMS NOZZLE

DEPENDENT VARIABLE C<sub>e</sub>

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.300	X/LNH	PHI	.200	.400
		135.000	.5350		
		180.000	.4760		.7310
		225.000	.0390		
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.250	X/LNH	PHI	.200	.400
		135.000	.5670		
		180.000	.4280		.7630
		225.000	.0590		
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.930	X/LNH	PHI	.200	.400
		135.000	.4050		
		180.000	.2860		.0310
		225.000	-.1440		
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 8.020	X/LNH	PHI	.200	.400
		135.000	-.0090		
		180.000	.1160		-.0630
		225.000	-.1820		

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B  
 AMES 97-717 1A9 OEA + S3 + T9 OMS NOZZLE

(RBOE110) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -8.1400 ORBITAL = .000  
 RUDDER = .0000 ELEVON = .000  
 RUDDLR = .0000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.210	X/LNM	.200
		PHI	.400
		135.000	.8070
		180.000	.5070
		225.000	-.0320
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.210	X/LNM	.200
		PHI	.400
		135.000	.7920
		180.000	.5530
		225.000	-.0720
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.220	X/LNM	.200
		PHI	.400
		135.000	.7000
		180.000	.5660
		225.000	-.1720
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 3.650	X/LNM	.200
		PHI	.400
		135.000	-.1910
		180.000	-.0150
		225.000	-.2380
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 5.710	X/LNM	.200
		PHI	.400
		135.000	-.1710
		180.000	.0420
		225.000	-.2390
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 7.770	X/LNM	.200
		PHI	.400
		135.000	-.2180
		180.000	-.1850
		225.000	-.2250
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.390	X/LNM	.200
		PHI	.400
		135.000	.4440
		180.000	.5870
		225.000	.0580

DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A98

ANES 97-707 1A9 C2A + S3 + T9 ONS NOZZLE

(RBC111)

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) ONS NOZZLE

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330

X/LNM	.200	.400
PHI		
135.000	.5970	
180.000	.4770	.7950
225.000	.0440	

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280

X/LNM	.200	.400
PHI		
135.000	.5790	
180.000	.4330	.8130
225.000	.0660	

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170

X/LNM	.200	.400
PHI		
135.000	.3640	
180.000	.4450	.3480
225.000	-.0720	

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.940

X/LNM	.200	.400
PHI		
135.000	.0330	
180.000	.3090	.0360
225.000	-.1390	

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980

X/LNM	.200	.400
PHI		
135.000	-.0710	
180.000	.2430	-.0040
225.000	-.1560	

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.050

X/LNM	.200	.400
PHI		
135.000	-.0740	
180.000	.1950	-.0430
225.000	-.1730	



DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

(RBOE11) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -8.0000 ORBINC = .5000  
 RUDDER = -15.0000 ELEVON = .0000  
 RUDDLR = .0000

REFERENCE DATA

SREF = 2.4210 SQ. FT. XMRP = 28.5310 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .03000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE					
MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.420	X/LNM	.210	.400	
		PHI			
		135.000	.7980		
		180.000	.4890	.8920	
		225.000	-.0440		
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.360	X/LNM	.210	.400	
		PHI			
		135.000	.7840		
		180.000	.5360	.6810	
		225.000	-.1660		
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.310	X/LNM	.210	.400	
		PHI			
		135.000	.7240		
		180.000	.5610	.3210	
		225.000	-.1640		
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.180	X/LNM	.210	.400	
		PHI			
		135.000	.1990		
		180.000	.4100	-.0380	
		225.000	-.2580		
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.940	X/LNM	.210	.400	
		PHI			
		135.000	-.2140		
		180.000	-.0250	-.2180	
		225.000	-.2450		
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.000	X/LNM	.210	.400	
		PHI			
		135.000	-.1880		
		180.000	.0350	-.1990	
		225.000	-.2490		
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.060	X/LNM	.210	.400	
		PHI			
		135.000	-.2300		
		180.000	-.0920	-.2220	
		225.000	-.2370		

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBOE11)

AMES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.390	X/LNM	.200	.400
	PHI		
	135.000	.4400	
	180.000	.5890	.7380
	225.000	.0510	
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -8.340	X/LNM	.200	.400
	PHI		
	135.000	.6120	
	180.000	.4790	.7250
	225.000	.0400	
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.290	X/LNM	.200	.400
	PHI		
	135.000	.5830	
	180.000	.4280	.8040
	225.000	.0560	
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.180	X/LNM	.200	.400
	PHI		
	135.000	.3840	
	180.000	.4480	.3600
	225.000	-.0600	
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930	X/LNM	.200	.400
	PHI		
	135.000	.0140	
	180.000	.3250	.0530
	225.000	-.1350	
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980	X/LNM	.200	.400
	PHI		
	135.000	-.0650	
	180.000	.2540	.0070
	225.000	-.1540	
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040	X/LNM	.200	.400
	PHI		
	135.000	-.0680	
	180.000	.1470	-.0330
	225.000	-.1740	

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

(RBCE12) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .040  
 RUDELR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.350	X/LNM	PHI
		.200	.400
		135.000	.6740
		180.000	.4730
		225.000	-.0700
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.310	X/LNM	PHI
		.200	.400
		135.000	.6920
		180.000	.5200
		225.000	-.1210
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.260	X/LNM	PHI
		.200	.400
		135.000	.6340
		180.000	.5030
		225.000	-.1990
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.170	X/LNM	PHI
		.200	.400
		135.000	.1320
		180.000	.2750
		225.000	-.2730
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.930	X/LNM	PHI
		.200	.400
		135.000	-.1530
		180.000	-.0660
		225.000	-.2450
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	X/LNM	PHI
		.200	.400
		135.000	-.1720
		180.000	.0230
		225.000	-.2610
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.020	X/LNM	PHI
		.200	.400
		135.000	-.2330
		180.000	-.1020
		225.000	-.2340

DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

(RBOE12)

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.0000 BETAT ( 1 ) = -8.320		X/LNM	.200
		PHI	.400
		135.000	.3420
		180.000	.4080
		225.000	.5590
			.0520
MACH ( 2 ) = 2.0000 BETAT ( 2 ) = -6.280		X/LNM	.200
		PHI	.400
		135.000	.4020
		180.000	.4490
		225.000	.6340
			.0230
MACH ( 2 ) = 2.0000 BETAT ( 3 ) = -4.240		X/LNM	.200
		PHI	.400
		135.000	.4990
		180.000	.4020
		225.000	.7020
			.0410
MACH ( 2 ) = 2.0000 BETAT ( 4 ) = -2.170		X/LNM	.200
		PHI	.400
		135.000	.3450
		180.000	.3910
		225.000	.2560
			-.1070
MACH ( 2 ) = 2.0000 BETAT ( 5 ) = 3.920		X/LNM	.200
		PHI	.400
		135.000	-.0270
		180.000	.2410
		225.000	-.0490
			-.1600
MACH ( 2 ) = 2.0000 BETAT ( 6 ) = 5.960		X/LNM	.200
		PHI	.400
		135.000	-.1110
		180.000	.1490
		225.000	-.0720
			-.1810
MACH ( 2 ) = 2.0000 BETAT ( 7 ) = 8.010		X/LNM	.200
		PHI	.400
		135.000	-.0960
		180.000	.0560
		225.000	-.1000
			-.1940

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-7J7 1A9 O2A + S3 + T9 OMS NOZZLE

(RBOE13) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUFLR = .000

## SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.310  
 X/LNM .200 .400  
 PHI  
 135.000 .5070  
 180.000 .4390  
 225.000 -.1060

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.280  
 X/LNM .200 .400  
 PHI  
 135.000 .5230  
 180.000 .4590  
 225.000 -.1780

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240  
 X/LNM .200 .400  
 PHI  
 135.000 .4660  
 180.000 .3810  
 225.000 -.2310

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.140  
 X/LNM .200 .400  
 PHI  
 135.000 .0890  
 180.000 .1740  
 225.000 -.2740

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940  
 X/LNM .200 .400  
 PHI  
 135.000 -.0200  
 180.000 .0600  
 225.000 -.1930

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990  
 X/LNM .200 .400  
 PHI  
 135.000 -.1390  
 180.000 .0340  
 225.000 -.2050

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.030  
 X/LNM .200 .400  
 PHI  
 135.000 -.2340  
 180.000 -.0780  
 225.000 -.2460

DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 ORA + S3 + T9 OMS NOZZLE

(RBOE13)

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.300		X/LNM	.200 .400
		PHI	
		135.000	.2590
		180.000	.2500
		225.000	.0760
			.4460
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -0.260		X/LNM	.200 .400
		PHI	
		135.000	.2570
		180.000	.3280
		225.000	.1670
			.5370
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -0.220		X/LNM	.200 .400
		PHI	
		135.000	.3490
		180.000	.3470
		225.000	-.0460
			.5230
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.140		X/LNM	.200 .400
		PHI	
		135.000	.2670
		180.000	.3110
		225.000	-.1370
			.1970
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.900		X/LNM	.200 .400
		PHI	
		135.000	-.0230
		180.000	.1690
		225.000	-.1730
			-.0790
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980		X/LNM	.200 .400
		PHI	
		135.000	-.0960
		180.000	.0650
		225.000	-.1930
			-.1160
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.120		X/LNM	.200 .400
		PHI	
		135.000	-.1290
		180.000	-.0490
		225.000	-.1940
			-.1590

(RBOE14) ( 24 MAY 73 )

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B  
A AMES 97-707 1A9 OBA + S3 + T9 OMS NOZZLE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500  
RUDDER = -15.000 ELEVON = .000  
RUDELRL = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE X/LNM .200 .400

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.300  
PHI  
135.000 .3170  
180.000 .3580  
225.000 -.1190

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.260  
X/LNM .200 .400  
PHI  
135.000 .2950  
180.000 .3680  
225.000 -.2070

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220  
X/LNM .200 .400  
PHI  
135.000 .2900  
180.000 .2780  
225.000 -.0578

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120  
X/LNM .200 .400  
PHI  
135.000 .0000  
180.000 .0450  
225.000 -.2670

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.950  
X/LNM .200 .400  
PHI  
135.000 -.0228  
180.000 .0470  
225.000 -.2060

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000  
X/LNM .200 .400  
PHI  
135.000 -.1240  
180.000 .0160  
225.000 -.2790

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.000  
X/LNM .200 .400  
PHI  
135.000 -.2270  
180.000 -.0980  
225.000 -.2760

(RBOE14)

## DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

ANES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

## SECTION ( 3 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.295	X/LNM PHI	.200	.400
		135.000	.0270	
		180.000	.0010	.0590
		225.000	.0990	
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	X/LNM PHI	.200	.400
		135.000	.1260	
		180.000	.1760	.4970
		225.000	.0420	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.200	X/LNM PHI	.200	.400
		135.000	.2130	
		180.000	.2980	.3670
		225.000	-.0400	
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.130	X/LNM PHI	.200	.400
		135.000	.1810	
		180.000	.1790	.0750
		225.000	-.1550	
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.950	X/LNM PHI	.200	.400
		135.000	.0090	
		180.000	.1950	-.0760
		225.000	-.1880	
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	X/LNM PHI	.200	.400
		135.000	-.0390	
		180.000	.0440	-.1270
		225.000	-.1980	
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.040	X/LNM PHI	.200	.400
		135.000	-.1630	
		180.000	-.0880	-.1890
		225.000	-.2040	



DATE 21 SEP 73

LABULATED PRESSURE DATA - 1A98

AVES 97-707 1A9 OEA + S3 + T9 OMS NOZZLE

# REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.6490 INCHES YMRP = .0000 INCHES  
 BREF = 39.6490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) OMS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.320

X/LNM	PHI
.200	.400
.210	.2140
.220	.3460
.230	.2980
.240	.1570

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.280

X/LNM	PHI
.200	.400
.210	.2780
.220	.3750
.230	.0850
.240	-.2180

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230

X/LNM	PHI
.200	.400
.210	.1750
.220	.2710
.230	-.0400
.240	-.2640

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 7.120

X/LNM	PHI
.200	.400
.210	-.0430
.220	-.0460
.230	-.1950
.240	-.2680

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.970

X/LNM	PHI
.200	.400
.210	-.0050
.220	.0640
.230	-.1880
.240	-.2760

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.030

X/LNM	PHI
.200	.400
.210	-.1260
.220	-.0140
.230	-.2790
.240	-.2200

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.080

X/LNM	PHI
.200	.400
.210	-.2360
.220	-.1680
.230	-.2680
.240	-.2750

# PARAMETRIC DATA

ALPHAT = 6.0000 ORBINC = .500  
 RUDDER = -15.0000 ELEVON = .000  
 RUOFLR = .0000

(RBOE15) ( 24 MAY 73 )

(RBOE15)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A98  
 AXES 97-757 1A9 02A + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000    BETAT ( 1 ) = -6.260	X/LNM	.200	.400
	PHI		
	135.000	.0430	
	180.000	.0480	.2470
	225.000	.0390	
MACH ( 2 ) = 2.000    BETAT ( 2 ) = -4.210	X/LNM	.200	.400
	PHI		
	135.000	.1410	
	180.000	.2780	.3190
	225.000	-.0360	
MACH ( 2 ) = 2.000    BETAT ( 3 ) = -.130	X/LNM	.200	.400
	PHI		
	35.000	.1380	
	180.000	.1290	.0570
	225.000	-.1480	
MACH ( 2 ) = 2.000    BETAT ( 4 ) = 3.970	X/LNM	.200	.400
	PHI		
	135.000	.0210	
	180.000	.1540	-.1059
	225.000	-.1860	
MACH ( 2 ) = 2.000    BETAT ( 5 ) = 6.020	X/LNM	.200	.400
	PHI		
	135.000	-.1250	
	180.000	.0530	-.1300
	225.000	-.1980	
MACH ( 2 ) = 2.000    BETAT ( 6 ) = 8.070	X/LNM	.200	.400
	PHI		
	135.000	.0730	
	180.000	-.1170	-.1920
	225.000	-.2000	

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-757 1A9 02A + S3 + T9 OMS NOZZLE

(RB0E16) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0310 SCALE

PARAMETRIC DATA

ALPHAT = 8.0000 ORBINC = .5000  
RUDDER = -15.0000 ELEVON = .0000  
RUDDFLR = .0000

SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.350  
X/LNM .200 .400  
PHI  
135.000 .1440  
180.000 .2970 .0370  
225.000 -.2260

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.290  
X/LNM .200 .400  
PHI  
135.000 .1640  
180.000 .3060 -.0610  
225.000 -.2630

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240  
X/LNM .200 .400  
PHI  
135.000 .1140  
180.000 .2620 -.0710  
225.000 -.2630

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110  
X/LNM .200 .400  
PHI  
135.000 -.0560  
180.000 -.0320 -.2140  
225.000 -.2630

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 4.000  
X/LNM .200 .400  
PHI  
135.000 -.0180  
180.000 .0320 -.1920  
225.000 -.2630

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.060  
X/LNM .200 .400  
PHI  
135.000 -.1270  
180.000 -.0030 -.2260  
225.000 -.2630

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.120  
X/LNM .200 .400  
PHI  
135.000 -.2000  
180.000 -.1560 -.2670  
225.000 -.2630

(RBOE16)

DATE 21 SEP 75 TABULATED PRESSURE DATA - 1A9B  
AMES 97-707 1A9 OSA + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.340

X/LNM .280 .400  
PHI  
135.000 .0000  
180.000 .0000  
225.000 .0000

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.275

X/LNM .250 .400  
PHI  
135.000 -.0320  
180.000 .0800  
225.000 -.1010

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220

X/LNM .200 .400  
PHI  
135.000 .0690  
180.000 .2090  
225.000 -.0610

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.120

X/LNM .200 .400  
PHI  
135.000 .1970  
180.000 .1410  
225.000 -.1900

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990

X/LNM .200 .400  
PHI  
135.000 .0220  
180.000 .1430  
225.000 -.1920

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.030

X/LNM .200 .400  
PHI  
135.000 -.0180  
180.000 .0210  
225.000 -.1960

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 6.110

X/LNM .200 .400  
PHI  
135.000 .1180  
180.000 -.0410  
225.000 -.1990

DATE 21 SEP 73

CALCULATED PRESSURE DATA - 1A9B

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AMES 97-707 1A9 OEA + S3 + T9 OMS NOZZLE

(RBC17) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 35.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8430 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = -500  
 RUDDER = -10.000 ELEVON = .000  
 RUFLR = .000

## SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.410	X/LNM	PHI	CP
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.360	135.000	.8290	.400
		180.000	.5180	.8790
		225.000	-.0310	
		X/LNM	PHI	CP
135.000	.8120	.400		
180.000	.5660	.6310		
225.000	-.0800			
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.300	X/LNM	PHI	CP
		135.000	.7240	.400
		180.000	.5670	.3170
		225.000	-.1670	
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.180	X/LNM	PHI	CP
		135.000	.1730	.400
		180.000	.3780	-.0490
		225.000	-.2470	
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.930	X/LNM	PHI	CP
		135.000	-.1920	.400
		180.000	-.0180	-.2120
		225.000	-.2330	
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.990	X/LNM	PHI	CP
		135.000	-.1880	.400
		180.000	.1070	-.1980
		225.000	-.2290	
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.090	X/LNM	PHI	CP
		135.000	-.2180	.400
		180.000	-.1080	-.2080
		225.000	-.2190	

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 OSA + S3 + T9 OMS NOZZLE (RBOE17)

SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.380  
X/LNM .200 .400  
PHI  
135.000 .4880  
180.000 .5830  
225.000 .0560

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330  
X/LNM .200 .400  
PHI  
135.000 .6330  
180.000 .4840  
225.000 .0440

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280  
X/LNM .200 .400  
PHI  
135.000 .6020  
180.000 .4470  
225.000 .0730

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -2.170  
X/LNM .200 .400  
PHI  
135.000 .3960  
180.000 .4520  
225.000 -.0560

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930  
X/LNM .200 .400  
PHI  
135.000 .0220  
180.000 .3250  
225.000 -.1360

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980  
X/LNM .200 .400  
PHI  
135.000 -.0670  
180.000 .2480  
225.000 -.1540

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040  
X/LNM .200 .400  
PHI  
135.000 -.0760  
180.000 .1510  
225.000 -.1720

DATE 21 SEP 75

TABULATED PRESSURE DATA - 1A98

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AWES 97-707 1A9 Q2A + S3 + T9 OWS NOZZLE

(R80E18) ( 24 MAY 73 )

## REFERENCE DATA

CREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

## PARAMETRIC DATA

ALPHAT = -4.0000 CRBINC = .5000  
 RUDDER = -10.0000 ELEVON = .0000  
 RUDELFLR = .0000

## SECTION ( 1 ) OWS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.340	X/LNM	PHI	CP
		.200	.400	
		135.000	.6620	
		180.000	.4980	.6690
		225.000	-.0770	
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.300	X/LNM	PHI	CP
		.200	.400	
		135.000	.6890	
		180.000	.5320	.4660
		225.000	-.1300	
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.250	X/LNM	PHI	CP
		.200	.400	
		135.000	.6090	
		180.000	.4940	.1620
		225.000	-.2070	
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.160	X/LNM	PHI	CP
		.200	.400	
		135.000	.1000	
		180.000	.2480	-.1210
		225.000	-.2620	
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.930	X/LNM	PHI	CP
		.200	.400	
		135.000	-.1770	
		180.000	-.0690	-.2330
		225.000	-.2380	
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	X/LNM	PHI	CP
		.200	.400	
		135.000	-.1750	
		180.000	.0150	-.2030
		225.000	-.2560	
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.020	X/LNM	PHI	CP
		.200	.400	
		135.000	-.2290	
		180.000	-.1100	-.2270
		225.000	-.2330	

DATE 21 SEP 75      TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 O2A + S3 + T9 ONS NOZZLE

(RBOE18)

## SECTION ( 1 ) ONS NOZZLE      DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000    BETAT ( 1 ) = -8.320

X/LNM	.200	.400
PHI		
135.000	.3780	
180.000	.4050	.5460
225.000	.0600	

MACH ( 2 ) = 2.000    BETAT ( 2 ) = -6.270

X/LNM	.200	.400
PHI		
135.000	.4260	
180.000	.4600	.6700
225.000	.0290	

MACH ( 2 ) = 2.000    BETAT ( 3 ) = -4.230

X/LNM	.200	.400
PHI		
135.000	.5180	
180.000	.4170	.7080
225.000	.0440	

MACH ( 2 ) = 2.000    BETAT ( 4 ) = -.180

X/LNM	.200	.400
PHI		
135.000	.3710	
180.000	.3980	.2960
225.000	-.1000	

MACH ( 2 ) = 2.000    BETAT ( 5 ) = 3.920

X/LNM	.200	.400
PHI		
135.000	-.0310	
180.000	.2400	-.0210
225.000	-.1630	

MACH ( 2 ) = 2.000    BETAT ( 6 ) = 5.960

X/LNM	.200	.400
PHI		
135.000	-.1110	
180.000	.1440	-.0740
225.000	-.1780	

MACH ( 2 ) = 2.000    BETAT ( 7 ) = 8.000

X/LNM	.200	.400
PHI		
135.000	-.1180	
180.000	.1440	-.1120
225.000	-.1890	



DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 CEA + S3 + T9 OMS NOZZLE

(RBOE19) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = .000 OSBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUDFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.320  
 X/LNM .200 .400  
 PHI  
 135.000 .4930  
 180.000 .4530  
 225.000 -.1120

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270  
 X/LNM .200 .400  
 PHI  
 135.000 .4870  
 180.000 .4680  
 225.000 -.1890

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240  
 X/LNM .200 .400  
 PHI  
 135.000 .4570  
 180.000 .3770  
 225.000 -.2280

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.140  
 X/LNM .200 .400  
 PHI  
 135.000 .0900  
 180.000 .1360  
 225.000 -.2640

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990  
 X/LNM .200 .400  
 PHI  
 135.000 -.0900  
 180.000 .0950  
 225.000 -.2580

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990  
 X/LNM .200 .400  
 PHI  
 135.000 -.1960  
 180.000 -.0030  
 225.000 -.2090

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.040  
 X/LNM .200 .400  
 PHI  
 135.000 -.2340  
 180.000 -.0960  
 225.000 -.2520

(RBOE19)

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 O2A + S3 + T9 OMS-NOZZLE

SECTION ( 1 ) OMS-NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.300	X/LNM	.200	.400
	PHI	.2010	
	135.000	.1960	.4570
	180.000	.0780	
	225.000		
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260	X/LNM	.200	.400
	PHI	.2510	
	135.000	.3280	.5810
	180.000	.0330	
	225.000		
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.228	X/LNM	.200	.400
	PHI	.3480	
	135.000	.3510	.9040
	180.000	-.0070	
	225.000		
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -1.140	X/LNM	.200	.400
	PHI	.2740	
	135.000	.3080	.1490
	180.000	-.1460	
	225.000		
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930	X/LNM	.200	.400
	PHI	-.0290	
	135.000	.1800	-.0860
	180.000	-.1760	
	225.000		
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980	X/LNM	.200	.400
	PHI	-.1040	
	135.000	.0900	-.1210
	180.000	-.1920	
	225.000		
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.020	X/LNM	.200	.400
	PHI	-.1320	
	135.000	-.0500	-.1620
	180.000	-.1940	
	225.000		

AUG 97-707 1A9 02A + S3 + T9 ONS NOZZLE

(RBOE2U) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) ONS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.300

X/LNM	.200	.400
PHI		
135.000	.2670	
180.000	.3900	.3030
225.000	-.1280	

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270

X/LNM	.200	.400
PHI		
135.000	.3250	
180.000	.3680	.1290
225.000	-.2050	

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220

X/LNM	.200	.400
PHI		
135.000	.2780	
180.000	.2720	-.0630
225.000	-.2650	

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.130

X/LNM	.200	.400
PHI		
135.000	-.0210	
180.000	.0260	-.2040
225.000	-.2560	

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.960

X/LNM	.200	.400
PHI		
135.000	-.0320	
180.000	.0200	-.2070
225.000	-.2660	

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000

X/LNM	.200	.400
PHI		
135.000	-.1360	
180.000	-.0120	-.2150
225.000	-.2670	

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.080

X/LNM	.200	.400
PHI		
135.000	-.2280	
180.000	-.1030	-.2550
225.000	-.2700	

## PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUDFLR = .000

(RBOCZU)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A98  
 AMES 97-757 1A9 OZA + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000    BETAT ( 1 ) = -8.280	X/LNM	.200	.400
	PHI		
	135.000	.0030	
	180.000	.0030	.0430
	225.000	.0950	
MACH ( 2 ) = 2.000    BETAT ( 2 ) = -8.240	X/LNM	.200	.400
	PHI		
	135.000	.1140	
	180.000	.1890	.4860
	225.000	.0400	
MACH ( 2 ) = 2.000    BETAT ( 3 ) = -4.200	X/LNM	.200	.400
	PHI		
	135.000	.2100	
	180.000	.3020	.3660
	225.000	-.0440	
MACH ( 2 ) = 2.000    BETAT ( 4 ) = -.130	X/LNM	.200	.400
	PHI		
	135.000	.1700	
	180.000	.1790	.0730
	225.000	-.1600	
MACH ( 2 ) = 2.000    BETAT ( 5 ) = 3.990	X/LNM	.200	.400
	PHI		
	135.000	.0020	
	180.000	.1870	-.1840
	225.000	-.1880	
MACH ( 2 ) = 2.000    BETAT ( 6 ) = 5.990	X/LNM	.200	.400
	PHI		
	135.000	-.0370	
	180.000	.0340	-.1280
	225.000	-.1980	
MACH ( 2 ) = 2.000    BETAT ( 7 ) = 8.040	X/LNM	.200	.400
	PHI		
	135.000	-.0790	
	180.000	-.0840	-.1860
	225.000	-.2120	

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 02A + S3 + T9 OMS NOZZLE

(RBOE21) ( 24 MAY 73 )

# REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

## SECTION ( 1 ) OMS NOZZLE

DEPENDENT VARIABLE CP		X/LNM	
MACH ( 1 ) = 1.555	BETAT ( 1 ) = -6.330	PHI	.480
		135.000	.1990
		180.000	.3460
		225.000	-.1800
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.290	PHI	.400
		135.000	.2440
		180.000	.3680
		225.000	-.2300
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.230	PHI	.400
		135.000	.1700
		180.000	.2790
		225.000	-.0360
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.120	PHI	.400
		135.000	-.0700
		180.000	-.1230
		225.000	-.2580
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.980	PHI	.400
		135.000	-.0250
		180.000	.0470
		225.000	-.2740
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.040	PHI	.400
		135.000	-.1260
		180.000	-.0200
		225.000	-.2730
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.110	PHI	.400
		135.000	-.2350
		180.000	-.1730
		225.000	-.2690

# PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUFLR = .000

DATE 21 SEP 73

## TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 OHS NOZZLE

(RBOE21)

SECTION ( 1 ) OHS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -8.310	X/LNM	.200
		PHI	.400
		135.000	-.0970
		180.000	-.0830
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -6.260	225.000	.0070
		X/LNM	.200
		PHI	.400
		135.000	.0300
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.210	180.000	.0670
		225.000	.0120
		X/LNM	.200
		PHI	.400
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.120	135.000	.1400
		180.000	.2790
		225.000	-.0600
		X/LNM	.200
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.970	PHI	.400
		135.000	.1300
		180.000	.1360
		225.000	-.1600
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.020	X/LNM	.200
		PHI	.400
		135.000	.0280
		180.000	.1670
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 9.070	225.000	-.1890
		X/LNM	.200
		PHI	.400
		135.000	.0190
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 9.070	180.000	.0350
		225.000	-.1990
		X/LNM	.200
		PHI	.400
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 9.070	135.000	.1040
		180.000	-.1270
		225.000	-.2060
		X/LNM	.200

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 (RBD222) ( 24 MAY 73 )

## PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUDDLR = .000

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5310 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BRFP = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0310 SCALE

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) OMS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.360  
 X/LNM .200 .400  
 PHI  
 135.000 .1300  
 180.000 .2980 .0000  
 225.000 -.2240

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.310  
 X/LNM .200 .400  
 PHI  
 135.000 .1500  
 180.000 .2940 -.0770  
 225.000 -.2640

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230  
 X/LNM .200 .400  
 PHI  
 135.000 .1980  
 180.000 .2570 -.0800  
 225.000 -.2630

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110  
 X/LNM .200 .400  
 PHI  
 135.000 -.0680  
 180.000 -.0520 -.2150  
 225.000 -.2560

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940  
 X/LNM .200 .400  
 PHI  
 135.000 -.0310  
 180.000 .0250 -.1980  
 225.000 -.2760

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.160  
 X/LNM .200 .400  
 PHI  
 135.000 -.1350  
 180.000 -.0600 -.2300  
 225.000 -.2760

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.120  
 X/LNM .200 .400  
 PHI  
 135.000 -.2180  
 180.000 -.1650 -.2640  
 225.000 -.2800

(RBOJ22)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 02A + S3 + T9 OMS NOZZLE

## SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.330	X/LNM	.200	.400
		PHI		
		135.000	-.1560	
		180.000	-.0028	-.1070
		225.000	-.1150	
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.280	X/LNM	.200	.400
		PHI		
		135.000	-.0180	
		180.000	.0790	-.0240
		225.000	-.1030	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.220	X/LNM	.200	.400
		PHI		
		135.000	.0690	
		180.000	.2220	.1920
		225.000	-.0630	
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.110	X/LNM	.200	.400
		PHI		
		135.000	.1620	
		180.000	.1270	.0530
		225.000	-.1580	
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 4.000	X/LNM	.200	.400
		PHI		
		135.000	.0280	
		180.000	.1450	-.0770
		225.000	-.1910	
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.050	X/LNM	.200	.400
		PHI		
		135.000	-.0280	
		180.000	.0280	-.1490
		225.000	-.1990	
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.110	X/LNM	.200	.400
		PHI		
		135.000	.1220	
		180.000	-.0400	-.1630
		225.000	-.2130	



(RBOE23) ( 24 MAY 73 )

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 AVES 97-707 1A9 OEA + S3 + T9 OMS NOZZLE

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE	X/LNM	PHI
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.400	.200	.400
	135.000	.800
	180.000	.400
	225.000	-.000
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.360	.200	.400
	135.000	.790
	180.000	.540
	225.000	-.060
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.290	.200	.400
	135.000	.720
	180.000	.560
	225.000	-.160
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.170	.200	.400
	135.000	.200
	180.000	.400
	225.000	-.250
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940	.200	.400
	135.000	-.190
	180.000	-.070
	225.000	-.230
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 8.060	.200	.400
	135.000	-.220
	180.000	-.090
	225.000	-.220
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.360	.200	.400
	135.000	.480
	180.000	.580
	225.000	.050

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-797 1A9 OEA + S3 + T9 OMS NOZZLE (RBOE23)

SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330  
X/LNM .200 .400  
PHI  
135.000 .6320  
180.000 .4810  
225.000 .0360

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280  
X/LNM .200 .400  
PHI  
135.000 .5990  
180.000 .4400  
225.000 .0650

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -1.170  
X/LNM .200 .400  
PHI  
135.000 .3850  
180.000 .4490  
225.000 -.0510

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.980  
X/LNM .200 .400  
PHI  
135.000 .0280  
180.000 .3220  
225.000 -.1340

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980  
X/LNM .200 .400  
PHI  
135.000 -.0680  
180.000 .2500  
225.000 -.1550

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040  
X/LNM .200 .400  
PHI  
135.000 -.0760  
180.000 .1430  
225.000 -.1780

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A99

AMES 97-717 1A9 Q2A + S3 + T9 QMS NOZZLE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5310 INCHES  
 LREF = 39.8490 INCHES YMRP = .0400 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

SECTION ( 1 ) QMS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -0.330

X/LNM	PHI	CP
.200	.400	
.400	.6760	
.600	.4810	
.800	-.0790	
1.000		

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.290

X/LNM	PHI	CP
.200	.400	
.400	.6830	
.600	.5300	
.800	-.1270	
1.000		

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

X/LNM	PHI	CP
.200	.400	
.400	.6080	
.600	.4910	
.800	-.2140	
1.000		

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.150

X/LNM	PHI	CP
.200	.400	
.400	.1440	
.600	.2810	
.800	-.2720	
1.000		

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

X/LNM	PHI	CP
.200	.400	
.400	-.1870	
.600	-.0750	
.800	-.2450	
1.000		

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.980

X/LNM	PHI	CP
.200	.400	
.400	-.1720	
.600	.1240	
.800	-.2570	
1.000		

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 6.030

X/LNM	PHI	CP
.200	.400	
.400	-.2290	
.600	-.1050	
.800	-.2380	
1.000		

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUDDLR = .000

(RBOC2A)

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 02A + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.310	X/LNM	.200
		PHI	.400
		135.000	.3820
		180.000	.4030
		225.000	.5530
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	X/LNM	.200
		PHI	.400
		135.000	.4320
		180.000	.4830
		225.000	.6630
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.230	X/LNM	.200
		PHI	.400
		135.000	.5180
		180.000	.4130
		225.000	.6980
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.160	X/LNM	.200
		PHI	.400
		135.000	.3740
		180.000	.3990
		225.000	.2830
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.920	X/LNM	.200
		PHI	.400
		135.000	-.0100
		180.000	.2540
		225.000	-.1570
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.960	X/LNM	.200
		PHI	.400
		135.000	-.0980
		180.000	.1900
		225.000	-.0640
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.010	X/LNM	.200
		PHI	.400
		135.000	-.1070
		180.000	.0530
		225.000	-.1078

DATE 21 SEP 73  
 LABULATED PRESSURE DATA - 1A9B  
 AMES 97-7J7 1A9 OCA + S3 + T9 OPS NOZZLE

(RBOE25) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = .000  
 RUDDER = 15.000  
 RUDDLR = .000  
 ORBINC = .000  
 ELEVON = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT.  
 LREF = 39.8490 INCHES  
 BREF = 39.8490 INCHES  
 SCALE = .0001 SCALE

SECTION ( 1 ) OPS NOZZLE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.320	X/LNM	PHI	X/LNM	PHI
		.200	.400	.200	.400
		.350	.510	.350	.510
		.500	.440	.500	.530
		.650	-.110	.650	-.110
		.800	.200	.800	.400
		.950	.500	.950	.230
		1.100	.460	1.100	.230
		1.250	-.190	1.250	.230
		1.400	.200	1.400	.400
		1.550	.450	1.550	.400
		1.700	.370	1.700	.460
		1.850	-.220	1.850	.460
		2.000	.200	2.000	.400
		2.150	.690	2.150	.400
		2.300	.150	2.300	-.140
		2.450	-.270	2.450	-.270
		2.600	.200	2.600	.400
		2.750	.160	2.750	.400
		2.900	.080	2.900	-.180
		3.050	-.270	3.050	-.270
		3.200	.200	3.200	.400
		3.350	.130	3.350	.400
		3.500	.030	3.500	-.200
		3.650	-.270	3.650	-.270
		3.800	.200	3.800	.400
		3.950	.130	3.950	.400
		4.100	.030	4.100	-.200
		4.250	-.270	4.250	-.270
		4.400	.200	4.400	.400
		4.550	.130	4.550	.400
		4.700	.030	4.700	-.200
		4.850	-.270	4.850	-.270
		5.000	.200	5.000	.400
		5.150	.130	5.150	.400
		5.300	.030	5.300	-.200
		5.450	-.270	5.450	-.270
		5.600	.200	5.600	.400
		5.750	.130	5.750	.400
		5.900	.030	5.900	-.200
		6.050	-.270	6.050	-.270
		6.200	.200	6.200	.400
		6.350	.130	6.350	.400
		6.500	.030	6.500	-.200
		6.650	-.270	6.650	-.270
		6.800	.200	6.800	.400
		6.950	.130	6.950	.400
		7.100	.030	7.100	-.200
		7.250	-.270	7.250	-.270
		7.400	.200	7.400	.400
		7.550	.130	7.550	.400
		7.700	.030	7.700	-.200
		7.850	-.270	7.850	-.270
		8.000	.200	8.000	.400
		8.150	.130	8.150	.400
		8.300	.030	8.300	-.200
		8.450	-.270	8.450	-.270
		8.600	.200	8.600	.400
		8.750	.130	8.750	.400
		8.900	.030	8.900	-.200
		9.050	-.270	9.050	-.270
		9.200	.200	9.200	.400
		9.350	.130	9.350	.400
		9.500	.030	9.500	-.200
		9.650	-.270	9.650	-.270
		9.800	.200	9.800	.400
		9.950	.130	9.950	.400

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 O2A + S3 + T9 OMS NOZZLE

(RBOE25)

## SECTION ( 1 ) OMS NOZZLE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.290

X/LNM	.200	.400
PHI		
135.000	.2220	
180.000	.2010	.4320
225.000	.0730	

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250

X/LNM	.200	.400
PHI		
135.000	.2750	
180.000	.3470	.6140
225.000	.0330	

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210

X/LNM	.200	.400
PHI		
135.000	.3660	
180.000	.3450	.5040
225.000	-.0190	

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.140

X/LNM	.200	.400
PHI		
135.000	.2980	
180.000	.3250	.1700
225.000	.1380	

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950

X/LNM	.200	.400
PHI		
135.000	.0200	
180.000	.2260	-.0560
225.000	-.1690	

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.020

X/LNM	.200	.400
PHI		
135.000	-.1340	
180.000	-.0400	-.1580
225.000	-.1930	

(RBOE26) ( 24 MAY 73 )

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A9B  
 AMES 97-717 1A9 02A + S3 + T9 OMS NOZZLE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.300  
 X/LNM .200 .400  
 PHI  
 135.000 .3150  
 180.000 .3990  
 225.000 -.1280

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.260

X/LNM .200 .400  
 PHI  
 135.000 .3290  
 180.000 .3730  
 225.000 -.2190

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220

X/LNM .200 .400  
 PHI  
 135.000 .2780  
 180.000 .2620  
 225.000 -.0700

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120

X/LNM .200 .400  
 PHI  
 135.000 -.1090  
 180.000 .1340  
 225.000 -.2640

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.980

X/LNM .200 .400  
 PHI  
 135.000 -.0100  
 180.000 .0630  
 225.000 -.2810

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.110

X/LNM .200 .400  
 PHI  
 135.000 -.1190  
 180.000 .1070  
 225.000 -.2830

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.050

X/LNM .200 .400  
 PHI  
 135.000 -.2280  
 180.000 -.1190  
 225.000 -.2550

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-707 IAS ORA + 53 + T9 OHS NOZZLE (MS0326)

SECTION ( 1 ) OHS NOZZLE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.280	X/LNM	.200	.400
		PHI		
		135.000	.0660	
		180.000	.0140	.0970
		225.000	.0990	
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.230	X/LNM	.200	.400
		PHI		
		135.000	.1270	
		180.000	.2090	.3460
		225.000	.0370	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.200	X/LNM	.200	.400
		PHI		
		135.000	.2070	
		180.000	.2970	.3790
		225.000	-.0510	
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.120	X/LNM	.200	.400
		PHI		
		135.000	.1990	
		180.000	.1860	.1000
		225.000	-.1520	
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.950	X/LNM	.200	.400
		PHI		
		135.000	.0280	
		180.000	.2170	-.0560
		225.000	-.1880	
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.990	X/LNM	.200	.400
		PHI		
		135.000	-.0280	
		180.000	.0740	-.1190
		225.000	-.2040	
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.030	X/LNM	.200	.400
		PHI		
		135.000	-.1850	
		180.000	-.1670	-.1810
		225.000	-.2060	



DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1AS Q2A + S3 + 79 OMS NOZZLE

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(RBO027) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .03140 SCALE

SECTION ( 1 ) OMS NOZZLE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.330  
 X/LNM .200 .400  
 PHI  
 135.000 .2140  
 180.000 .3460  
 225.000 -.1530

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.270  
 X/LNM .200 .400  
 PHI  
 135.000 .2510  
 180.000 .3680  
 225.000 -.2320

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230  
 X/LNM .200 .400  
 PHI  
 135.000 .1580  
 180.000 .2730  
 225.000 -.0520

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.110  
 X/LNM .200 .400  
 PHI  
 135.000 -.0550  
 180.000 -.1490  
 225.000 -.2670

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.990  
 X/LNM .200 .400  
 PHI  
 135.000 -.0070  
 180.000 .0790  
 225.000 -.1660

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.030  
 X/LNM .200 .400  
 PHI  
 135.000 -.1160  
 180.000 .0070  
 225.000 -.2830

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.100  
 X/LNM .200 .400  
 PHI  
 135.000 -.2380  
 180.000 -.1790  
 225.000 -.2680

PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUOFLR = .000

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 ANES 97-707 1A9 02A + S3 + T9 OMS NOZZLE (R0C27)

SECTION ( 1 ) OMS NOZZLE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.300  
 PHI  
 135.000 -.1220  
 180.000 -.0610  
 225.000 .0240

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250  
 PHI  
 135.000 .0590  
 180.000 .0670  
 225.000 .0330

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200  
 PHI  
 135.000 .1420  
 180.000 .2790  
 225.000 -.0410

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.120  
 PHI  
 135.000 .1510  
 180.000 .1380  
 225.000 -.1520

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.970  
 PHI  
 135.000 .0260  
 180.000 .1820  
 225.000 -.1890

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.000  
 PHI  
 135.000 .0430  
 180.000 .0670  
 225.000 -.2020

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.070  
 PHI  
 135.000 .0770  
 180.000 -.1210  
 225.000 -.2110

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 AVES 97-717 1A9 02A + S3 + T9 OMS NOZZLE

(RBOC28) ( 24 MAY 73 )

PARAMETRIC DATA  
 ALPHAT = 8.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUOFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5375 INCHES  
 LREF = 39.6491 INCHES YMRP = .0000 INCHES  
 BREF = 39.6491 INCHES ZMRP = .0000 INCHES  
 SCALE = .0375 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555	BETAT ( 1 ) = -0.350	X/LNM	.200 .400
		PHI	
		135.000	.1390
		180.000	.2910 .0340
		225.000	-.2240
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -0.300	X/LNM	.200 .400
		PHI	
		135.000	.1560
		180.000	.2970 -.0650
		225.000	-.2640
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -0.250	X/LNM	.200 .400
		PHI	
		135.000	.0890
		180.000	.2450 -.1470
		225.000	-.2690
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.110	X/LNM	.200 .400
		PHI	
		135.000	-.0610
		180.000	-.0430 -.2160
		225.000	-.2600
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 0.000	X/LNM	.200 .400
		PHI	
		135.000	-.0070
		180.000	.0450 -.1080
		225.000	-.2680
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 0.080	X/LNM	.200 .400
		PHI	
		135.000	-.1180
		180.000	-.0520 -.2290
		225.000	-.2660
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 0.150	X/LNM	.200 .400
		PHI	
		135.000	-.2130
		180.000	-.1740 -.2620
		225.000	-.2750

(00028)

DATE 21 SEP 75 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 OZA + S3 + T9 OMS NOZZLE

SECTION ( 1 ) OMS NOZZLE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.320	X/LNM	.200	.400
	PHI		
	135.000	-.1680	
	180.000	.0000	-.1100
	225.000	-.1120	
MACH ( 2 ) = 2.000 BETAT ( 2 ) = -0.280	X/LNM	.200	.400
	PHI		
	135.000	-.0060	
	180.000	.0800	.0060
	225.000	-.0790	
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210	X/LNM	.200	.400
	PHI		
	135.000	.0560	
	180.000	.2180	.2260
	225.000	-.0590	
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.110	X/LNM	.200	.400
	PHI		
	135.000	.2150	
	180.000	.1380	.0560
	225.000	-.1440	
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990	X/LNM	.200	.400
	PHI		
	135.000	.0920	
	180.000	.1630	-.0560
	225.000	-.1880	
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.090	X/LNM	.200	.400
	PHI		
	135.000	.0100	
	180.000	.0580	-.1430
	225.000	-.2040	
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.110	X/LNM	.200	.400
	PHI		
	135.000	.1410	
	180.000	-.0380	-.1720
	225.000	-.2160	

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-7J7 1A9 02A + S3 + T9 BODY FLAP

(RBOFJ) ( 24 MAY 73 )

### PARAMETRIC DATA

BETAT	=	.000	ORBNIC	=	.500
RUDDER	=	.0000	ELEVON	=	.0000
RUDFLR	=	.0000			

## REFERENCE DATA

SREF =	2.4210 SQ. FT.	YREF =	28.9300 INCHES
UREF =	39.8490 INCHES	ZREF =	.0000 INCHES
BREF =	39.8490 INCHES		.0000 INCHES
SCALE =	.0300 SCALE		

SECTION (1) BODY FLAP	DEPENDENT VARIABLE CP
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
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31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
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41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
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56	56
57	57
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61	61
62	62
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64	64
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67	67
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71	71
72	72
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79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

NAME ( 1 ) =	X/LB	PHI
ALPHAT ( 1 ) = -8.400	1.039	
		.000
		-.1130

WACH ( 1 ) = 1.555	ALPHAT ( 2 ) = -6.330	X/LB	1.039
		PHI	
		.022	-.1000
		40.000	-.1330

MARCH ( 1 ) = 1.535 ALPHAT ( 3 ) = -4.250  
 X/LB 1.539  
 441 0000 -0920

4007	( 1 ) = 1.355	ALPHAT( 4 ) = -2.190	X/LB	1.039
			PHI	
			.000	-.0770
			40.000	-.1180

COACH ( 1 ) = 1.555	ALPHA( 5 ) = -.120	X/LB	1.039
		PHI	
			-.16805
			-.17845

ALPHAT( 6) = 1.950	K/LB	1.039
	PHI	
		-.0550
		-.0750

```

MACH ( 1 ) = 1.555 ALPHAT( 7 ) = 4.010
X/LB      1.039
PHI
1.000      -0.5640
40.0000    -0.0741

```

NAME	UNIT	VALUE
ALPHAT(0)	1	1.555
ALPHAT(1)	1	1.555
ALPHAT(2)	1	1.555
ALPHAT(3)	1	1.555
ALPHAT(4)	1	1.555
ALPHAT(5)	1	1.555
ALPHAT(6)	1	1.555
ALPHAT(7)	1	1.555
ALPHAT(8)	1	1.555
ALPHAT(9)	1	1.555
ALPHAT(10)	1	1.555
ALPHAT(11)	1	1.555
ALPHAT(12)	1	1.555
ALPHAT(13)	1	1.555
ALPHAT(14)	1	1.555
ALPHAT(15)	1	1.555
ALPHAT(16)	1	1.555
ALPHAT(17)	1	1.555
ALPHAT(18)	1	1.555
ALPHAT(19)	1	1.555
ALPHAT(20)	1	1.555
ALPHAT(21)	1	1.555
ALPHAT(22)	1	1.555
ALPHAT(23)	1	1.555
ALPHAT(24)	1	1.555
ALPHAT(25)	1	1.555
ALPHAT(26)	1	1.555
ALPHAT(27)	1	1.555
ALPHAT(28)	1	1.555
ALPHAT(29)	1	1.555
ALPHAT(30)	1	1.555
ALPHAT(31)	1	1.555
ALPHAT(32)	1	1.555
ALPHAT(33)	1	1.555
ALPHAT(34)	1	1.555
ALPHAT(35)	1	1.555
ALPHAT(36)	1	1.555
ALPHAT(37)	1	1.555
ALPHAT(38)	1	1.555
ALPHAT(39)	1	1.555
ALPHAT(40)	1	1.555
ALPHAT(41)	1	1.555
ALPHAT(42)	1	1.555
ALPHAT(43)	1	1.555
ALPHAT(44)	1	1.555
ALPHAT(45)	1	1.555
ALPHAT(46)	1	1.555
ALPHAT(47)	1	1.555
ALPHAT(48)	1	1.555
ALPHAT(49)	1	1.555
ALPHAT(50)	1	1.555
ALPHAT(51)	1	1.555
ALPHAT(52)	1	1.555
ALPHAT(53)	1	1.555
ALPHAT(54)	1	1.555
ALPHAT(55)	1	1.555
ALPHAT(56)	1	1.555
ALPHAT(57)	1	1.555
ALPHAT(58)	1	1.555
ALPHAT(59)	1	1.555
ALPHAT(60)	1	1.555
ALPHAT(61)	1	1.555
ALPHAT(62)	1	1.555
ALPHAT(63)	1	1.555
ALPHAT(64)	1	1.555
ALPHAT(65)	1	1.555
ALPHAT(66)	1	1.555
ALPHAT(67)	1	1.555
ALPHAT(68)	1	1.555
ALPHAT(69)	1	1.555
ALPHAT(70)	1	1.555
ALPHAT(71)	1	1.555
ALPHAT(72)	1	1.555
ALPHAT(73)	1	1.555
ALPHAT(74)	1	1.555
ALPHAT(75)	1	1.555
ALPHAT(76)	1	1.555
ALPHAT(77)	1	1.555
ALPHAT(78)	1	1.555
ALPHAT(79)	1	1.555
ALPHAT(80)	1	1.555
ALPHAT(81)	1	1.555
ALPHAT(82)	1	1.555
ALPHAT(83)	1	1.555
ALPHAT(84)	1	1.555
ALPHAT(85)	1	1.555
ALPHAT(86)	1	1.555
ALPHAT(87)	1	1.555
ALPHAT(88)	1	1.555
ALPHAT(89)	1	1.555
ALPHAT(90)	1	1.555
ALPHAT(91)	1	1.555
ALPHAT(92)	1	1.555
ALPHAT(93)	1	1.555
ALPHAT(94)	1	1.555
ALPHAT(95)	1	1.555
ALPHAT(96)	1	1.555
ALPHAT(97)	1	1.555
ALPHAT(98)	1	1.555
ALPHAT(99)	1	1.555
ALPHAT(100)	1	1.555
ALPHAT(101)	1	1.555
ALPHAT(102)	1	1.555
ALPHAT(103)	1	1.555
ALPHAT(104)	1	1.555
ALPHAT(105)	1	1.555
ALPHAT(106)	1	1.555
ALPHAT(107)	1	1.555
ALPHAT(108)	1	1.555
ALPHAT(109)	1</	

(RBOFT1)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 OEA + S3 + T9 BODY FLAP

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.935 ALPHAT( 9 ) = 8.130 X/LB 1.039  
PHI  
.000 -.0370  
40.000 -.0940

MACH ( 2 ) = 2.000 ALPHAT( 1 ) = -8.360 X/LB 1.039  
PHI  
.000 -.1000  
40.000 -.1080

MACH ( 2 ) = 2.000 ALPHAT( 2 ) = -6.310 X/LB 1.039  
PHI  
.000 -.0910  
40.000 -.1100

MACH ( 2 ) = 2.000 ALPHAT( 3 ) = -4.250 X/LB 1.039  
PHI  
.000 -.0800  
40.000 -.1070

MACH ( 2 ) = 2.000 ALPHAT( 4 ) = -2.210 X/LB 1.039  
PHI  
.000 -.0600  
40.000 -.1030

MACH ( 2 ) = 2.000 ALPHAT( 5 ) = -.160 X/LB 1.039  
PHI  
.000 -.0750  
40.000 -.0990

MACH ( 2 ) = 2.000 ALPHAT( 6 ) = 1.690 X/LB 1.039  
PHI  
.000 -.0650  
40.000 -.0940

MACH ( 2 ) = 2.000 ALPHAT( 7 ) = 3.930 X/LB 1.039  
PHI  
.000 -.0550  
40.000 -.0870

MACH ( 2 ) = 2.000 ALPHAT( 8 ) = 5.980 X/LB 1.039  
PHI  
.000 -.0380  
40.000 -.0730

(RSCF:11)

DATE 21 SEP 73

DEPENDENT VARIABLE CP

MACH ( 2 )	2.000	ALPHAT ( 9 )	8.020	X/LB	1.039
				PHI	
					-.0280
					-.0699

ANES 97-707 1A9 02A + S3 + T9 BODY FLAP (RBOFD2) ( 24 MAY 73 )

PARAMETRIC DATA  
 ALPHAT = 8.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUDFLR = .000

REFERENCE DATA

YREF = 2.4210 SQ.FT. YMRP = 28.5320 INCHES  
 UREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.140	X/LB	1.039
		PHI	
		.000	-.0190
		40.000	.0130
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -5.110	X/LB	1.039
		PHI	
		.000	-.0100
		40.000	.0190
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.090	X/LB	1.039
		PHI	
		.000	-.0250
		40.000	-.0200
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.110	X/LB	1.039
		PHI	
		.000	-.0090
		40.000	-.0930
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.140	X/LB	1.039
		PHI	
		.000	-.0340
		40.000	-.1170
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.190	X/LB	1.039
		PHI	
		.000	-.0280
		40.000	-.1330
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -6.320	X/LB	1.039
		PHI	
		.000	-.0390
		40.000	-.1680
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	X/LB	1.039
		PHI	
		.000	-.0350
		40.000	-.1070



DATE 21 SEP 73      CALCULATED PRESSURE DATA - 1A98  
 CASE 97-707 1A9 ORA + S3 + T9 BODY FLAP

(R00F12)

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210  
 X/LB 1.039  
 PHI -.000  
 PHI -.0190  
 PHI -.0810

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.990  
 X/LB 1.039  
 PHI -.000  
 PHI -.0540  
 PHI -.0760

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 6.060  
 X/LB 1.039  
 PHI -.000  
 PHI -.0610  
 PHI -.0950

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.120  
 X/LB 1.039  
 PHI -.000  
 PHI -.0720  
 PHI -.0880

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AWES 97-707 1A9 Q2A + S3 + T9 BODY FLAP

(RBOF03) ( 24 MAY 73 )

# REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 6.1441 ORBINC = .900  
 RUDDER = .1441 ELEVON = .1440  
 RUDFLR = .1441

## DEPENDENT VARIABLE CP

### SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.120	X/LB	PHI
		1.039	.000
			40.000
			-.0030
			-.0030

MACH ( 1 ) = 1.555	BETAT ( 2 ) = -5.070	X/LB	PHI
		1.039	.000
			40.000
			-.0180
			.0300

MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.050	X/LB	PHI
		1.039	.000
			40.000
			-.0380
			-.0180

MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.060	X/LB	PHI
		1.039	.000
			40.000
			-.0250
			-.1030

MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.110	X/LB	PHI
		1.039	.000
			40.000
			-.0430
			-.1240

MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.140	X/LB	PHI
		1.039	.000
			40.000
			-.0420
			-.1420

MACH ( 2 ) = 2.000	BETAT ( 1 ) = -6.300	X/LB	PHI
		1.039	.000
			40.000
			-.0580
			-.1760

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	X/LB	PHI
		1.039	.000
			40.000
			-.0510
			-.1300

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B  
 CASES 97-71.7 1A9 02A + S3 + T9 BODY FLAP (RB-703)

SECTION (1) BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.000	BETAT (3) = -4.200	X/LB	1.039
		PHI	
		.000	-.0360
		40.000	-.0920
MACH (2) = 2.000	BETAT (4) = 3.970	X/LB	1.039
		PHI	
		.000	-.0620
		40.000	-.0860
MACH (2) = 2.000	BETAT (5) = 6.030	X/LB	1.039
		PHI	
		.000	-.0730
		40.000	-.1020
MACH (2) = 2.000	BETAT (6) = 8.080	X/LB	1.039
		PHI	
		.000	-.0910
		40.000	-.1660

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBOFLA) ( 24 MAY 73 )

AMES 97-707 1A9 OCA + S3 + T9 BODY FLAP

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .00300 SCALE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUOFLR = .000

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.090	X/LB	PHI
		1.039	
		.000	-.0320
		40.000	-.0320
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -5.070	X/LB	PHI
		1.039	
		.000	-.0180
		40.000	.0140
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.040	X/LB	PHI
		1.039	
		.000	-.0490
		40.000	-.0510
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.060	X/LB	PHI
		1.039	
		.000	-.0160
		40.000	-.1020
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.080	X/LB	PHI
		1.039	
		.000	-.0250
		40.000	-.1140
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.100	X/LB	PHI
		1.039	
		.000	-.0460
		40.000	-.1630
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.270	X/LB	PHI
		1.039	
		.000	-.0570
		40.000	-.1850
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.240	X/LB	PHI
		1.039	
		.000	-.0680
		40.000	-.1240

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 CEA + S3 + T9 BODY FLAP

(RBOFT04)

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200 X/LB 1.039  
PHI  
.000 -.0450  
40.000 -.0770

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.990 X/LB 1.039  
PHI  
.000 -.0680  
40.000 -.0960

A

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.990 X/LB 1.039  
PHI  
.000 -.0840  
40.000 -.1150

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.030 X/LB 1.039  
PHI  
.000 -.1000  
40.000 -.1590

AMES 97-707 IAS OEA + S3 + T9 BODY FLAP

(RBOFOS) ( 24 MAY 75 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 2.0000 ORBINC = .500  
 RUDDER = .0000 ELEVON = .000  
 RUDFLR = .0000

## SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.100	X/LB	1.039
		PHI	
		.000	-.0310
		40.000	-.0990
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -5.070	X/LB	1.039
		PHI	
		.000	-.0310
		40.000	-.0190
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.050	X/LB	1.039
		PHI	
		.000	-.0420
		40.000	-.0650
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.050	X/LB	1.039
		PHI	
		.000	-.0240
		40.000	-.1080
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.070	X/LB	1.039
		PHI	
		.000	-.0450
		40.000	-.1140
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.080	X/LB	1.039
		PHI	
		.000	-.1060
		40.000	-.1820
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -6.280	X/LB	1.039
		PHI	
		.000	-.0650
		40.000	-.1520
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	X/LB	1.039
		PHI	
		.000	-.0640
		40.000	-.1110

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 O2A + S3 + T9 BODY FLAP

(RBQF05)

SECTION ( 1 ) BODY FLAP  
DEPENDENT VARIABLE CF

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.140	X/LB	1.039
		PHI	.000
		40.000	-.0550
			40.000 - .0790
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.940	X/LB	1.039
		PHI	.000
		40.000	-.0780
			40.000 - .1000
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.980	X/LB	1.039
		PHI	.000
		40.000	-.0890
			40.000 - .1240
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.020	X/LB	1.039
		PHI	.000
		40.000	-.1020
			40.000 - .1180

(RBOF06) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = .0000 ORBINC = .500  
 RUDDER = .0000 ELEVON = .0000  
 RUDEFLR = .0000

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 OSA + S3 + T9 BODY FLAP

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.100 X/LB 1.039  
 PHI .0000 -0.0410  
 40.0000 -0.1100

MACH ( 2 ) = 1.555 BETAT ( 2 ) = -5.080

X/LB 1.039  
 PHI .0000 -0.0470  
 40.0000 -0.0660

MACH ( 3 ) = 1.555 BETAT ( 3 ) = -3.060

X/LB 1.039  
 PHI .0000 -0.0490  
 40.0000 -0.0490

MACH ( 4 ) = 1.555 BETAT ( 4 ) = 5.080

X/LB 1.039  
 PHI .0000 -0.0330  
 40.0000 -0.1070

MACH ( 5 ) = 1.555 BETAT ( 5 ) = 7.060

X/LB 1.039  
 PHI .0000 -0.0660  
 40.0000 -0.1100

MACH ( 6 ) = 1.555 BETAT ( 6 ) = 9.090

X/LB 1.039  
 PHI .0000 -0.1120  
 40.0000 -0.1750

MACH ( 7 ) = 2.000 BETAT ( 1 ) = -8.290

X/LB 1.039  
 PHI .0000 -0.0780  
 40.0000 -0.1720

MACH ( 8 ) = 2.000 BETAT ( 2 ) = -6.250

X/LB 1.039  
 PHI .0000 -0.0790  
 40.0000 -0.1180



DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A99  
 AMES 97-7U7 1A9 02A + S3 + T9 BODY FLAP

(RBCF16)

SECTION ( 1 ) BODY FLAP      DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.0000	BETAT ( 3 ) = -0.130	X/LB	1.039
		PHI	
		.000	-.0980
		40.000	-.0990
MACH ( 2 ) = 2.0000	BETAT ( 4 ) = 3.950	X/LB	1.039
		PHI	
		.000	-.0890
		40.000	-.1160
MACH ( 2 ) = 2.0000	BETAT ( 5 ) = 5.980	X/LB	1.039
		PHI	
		.000	-.0890
		40.000	-.1270

(RBOFUT) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -2.000 ORBINC = .300  
 RUDDER = .000 ELEVON = .000  
 RUDFLR = .000

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

REFERENCE DATA

SREF = 2.4210 SQ.FT. ORP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YARP = .0000 INCHES  
 DREF = 39.8490 INCHES ZARP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.110	X/LB	PHI
		1.039	
		.000	-.0680
		40.000	-.1140

MACH ( 1 ) = 1.555	BETAT ( 2 ) = -5.080	X/LB	PHI
		1.039	
		.000	-.0630
		40.000	-.0550

MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.070	X/LB	PHI
		1.039	
		.000	-.0480
		40.000	-.0800

MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.040	X/LB	PHI
		1.039	
		.000	-.0730
		40.000	-.1190

MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.060	X/LB	PHI
		1.039	
		.000	-.0800
		40.000	-.1210

MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.080	X/LB	PHI
		1.039	
		.000	-.1150
		40.000	-.1550

MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.310	X/LB	PHI
		1.039	
		.000	-.0960
		40.000	-.2040

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.260	X/LB	PHI
		1.039	
		.000	-.1130
		40.000	-.1940

DATE 21 SEP 75  
 TAPULATED PRESSURE DATA - 1498  
 APES 97-747 1A9 02A + S3 + T9 BODY FLAP  
 (RBOF07)

SECTION ( 1 ) BODY FLAP  
 DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.230	X/LB	1.039
		PHI	
		.000	-.0950
		40.000	-.1190
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.940	X/LB	1.039
		PHI	
		.000	-.1020
		40.000	-.1320
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.970	X/LB	1.039
		PHI	
		.000	-.1240
		40.000	-.1380
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.010	X/LB	1.039
		PHI	
		.000	-.1280
		40.000	-.1470

(RBOF58) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -4.0000 ORBINC = .5000  
 RUDDER = .0000 ELEVON = .0000  
 RUOTLR = .0000

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.130	X/LB	1.039	PHI
		.000	-.1130	
		40.000	-.1780	
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.150	X/LB	1.039	PHI
		.000	-.0730	
		40.000	-.0940	
MACH ( 2 ) = 1.555	BETAT ( 3 ) = -3.070	X/LB	1.039	PHI
		.000	-.0610	
		40.000	-.0840	
MACH ( 3 ) = 1.555	BETAT ( 4 ) = 5.030	X/LB	1.039	PHI
		.000	-.0750	
		40.000	-.1400	
MACH ( 4 ) = 1.555	BETAT ( 5 ) = 7.050	X/LB	1.039	PHI
		.000	-.1110	
		40.000	-.1110	
MACH ( 5 ) = 1.555	BETAT ( 6 ) = 9.070	X/LB	1.039	PHI
		.000	-.1180	
		40.000	-.1840	
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.310	X/LB	1.039	PHI
		.000	-.1200	
		40.000	-.2070	
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	X/LB	1.039	PHI
		.000	-.1380	
		40.000	-.2110	

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 OCA + S3 + T9 BODY FLAP

(RBOF08)

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.0000	BETAT ( 3 ) = -4.2300	X/LB	1.039
		PHI	
		.0000	-.1220
		40.0000	-.1240
MACH ( 2 ) = 2.0000	BETAT ( 4 ) = 3.9200	X/LB	1.039
		PHI	
		.0000	-.1180
		40.0000	-.1450
MACH ( 2 ) = 2.0000	BETAT ( 5 ) = 5.9600	X/LB	1.039
		PHI	
		.0000	-.1450
		40.0000	-.1530
MACH ( 2 ) = 2.0000	BETAT ( 6 ) = 8.0000	X/LB	1.039
		PHI	
		.0000	-.1440
		40.0000	-.1580

DATE 21 SEP 73

\*ADJUSTED PRESSURE DATA - 1A98

PAGE 542

AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

(RBOFUG) ( 24 MAY 73 )

## REFERENCE DATA

SECF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LEFC = 39.8490 INCHES YMRP = .0000 INCHES  
 SECF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

## SECTION ( 1 ) BODY FLAP

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.180

X/LB 1.039  
 PHI  
 .0000 -0.1230  
 40.0000 -0.1960

MACH ( 2 ) = 1.555 BETAT ( 2 ) = -6.170

X/LB 1.039  
 PHI  
 .0000 -0.0930  
 40.0000 -0.1070

MACH ( 3 ) = 1.555 BETAT ( 3 ) = -4.180

X/LB 1.039  
 PHI  
 .0000 -0.0590  
 40.0000 -0.0970

MACH ( 4 ) = 1.555 BETAT ( 4 ) = 3.640

X/LB 1.039  
 PHI  
 .0000 -0.0790  
 40.0000 -0.1370

MACH ( 5 ) = 1.555 BETAT ( 5 ) = 5.690

X/LB 1.039  
 PHI  
 .0000 -0.0840  
 40.0000 -0.1400

MACH ( 6 ) = 1.555 BETAT ( 6 ) = 7.740

X/LB 1.039  
 PHI  
 .0000 -0.1390  
 40.0000 -0.1230

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.300

X/LB 1.039  
 PHI  
 .0000 -0.1100  
 40.0000 -0.2020

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.300

X/LB 1.039  
 PHI  
 .0000 -0.1420  
 40.0000 -0.2160

## PARAMETRIC DATA

ALPHAT = -6.0000 OREING = .500  
 RUDECE = .0000 ELEVON = .000  
 RUOTER = .0000

DATE 21 SEP 79 TABULATED PRESSURE DATA - 1A9B

(RBOFT19)

AVES 97-707 149 02A + S3 + T9 BODY FLAP

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.250  
X/LB 1.039  
PHI .000 -.1260  
40.000 -.1190

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.930  
X/LB 1.039  
PHI .000 -.1300  
40.000 -.1460

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 0.020  
X/LB 1.039  
PHI .000 -.1400  
40.000 -.1650

Case: 00-7171 AG, CA, S3 + T9 B:CY F:AO

1932

CONFIDENTIAL

[illegible]

INDEPENDENT VARIABLE CP

二、三、四、五、六、七、八、九、十、十一、十二、十三、十四、十五、十六、十七、十八、十九、二十、二十一、二十二、二十三、二十四、二十五、二十六、二十七、二十八、二十九、三十、三十一、三十二、三十三、三十四、三十五、三十六、三十七、三十八、三十九、四十、四十一、四十二、四十三、四十四、四十五、四十六、四十七、四十八、四十九、五十、五十一、五十二、五十三、五十四、五十五、五十六、五十七、五十八、五十九、六十、六十一、六十二、六十三、六十四、六十五、六十六、六十七、六十八、六十九、七十、七十一、七十二、七十三、七十四、七十五、七十六、七十七、七十八、七十九、八十、八十一、八十二、八十三、八十四、八十五、八十六、八十七、八十八、八十九、九十、九十一、九十二、九十三、九十四、九十五、九十六、九十七、九十八、九十九、一百。

[illegible][illegible][illegible]

WAGON (1) = 1 555	BEAT (4) = 2 650	X/LB	1 039
		BEAT	- 10390
			- 1460

[illegible]

MACH	( 3 ) =	1.555	BETA	( 6 ) =	7.721	X	=	1.039
						P	=	- .1871
						A	=	.1341
						S	=	.1341

$$\text{Ag}^+ + \text{Cl}^- \rightleftharpoons \text{AgCl} \quad (2) \quad K = 2 \times 10^6$$

```
COM(2) = 2.140 BETAY(2) = -6.290  
X(2) = 1.039  
Y(2) = -1.870
```



DATE 29 SEP 71

1A9B PRESSURE DATA

(111 JCB5)

AMES 97-717 1A9 CCA + S3 + T9 BODY FLAF

DEPENDENT VARIABLE CP

**SECTION ( 1 ) BODY FLAP**

$$\beta_1 = 2.14 \quad \beta_2 = 3.14 \quad \beta_3 = 4.20$$

X/LB	1.039
FBI	- .1340
20.144	- .1220

$$\text{MACH } (2) = 2.000 \text{ BETAT } (4) = -.175$$

607-1111  
607-1111  
607-1111

$$\text{PETA}^*(2) = 2.940 \text{ PETA}^*(5) = 3.940$$

X/LB	1.039
PHI	-0.1370
PHI	-0.1520

$$\text{BETAI} (6) = 5.98\%$$

X/LB	1.039
FHI	-1.411
...	-1.570

$$\text{MACM} : 21 = 2.100 \text{ BETAT} (7) = 8.050$$

X/LB	1.039
PHI	
.000	-1.1360
.000	-1.5900

AMES 97-707 1A9 ORA + S3 + T9 BODY FLAP

(E50F11) (24 MAY 73)

REFERENCE DATA

TYPE = 2.4000 SQUARE XMRP = 25.5300 INCHES  
 TYPE = 25.5300 INCHES XMRP = 25.5300 INCHES  
 TYPE = 25.5300 INCHES XMRP = 25.5300 INCHES  
 TYPE = 25.5300 INCHES XMRP = 25.5300 INCHES

PARAMETRIC DATA

ALPHA = -8.0000 COUING = 1.0000  
 ROGER = -15.0000 ELEVON = 1.0000  
 SUPPLER = 1.0000

DEPENDENT VARIABLE CP

MACH (1) = 1.555	BETAT (1) = -8.420	X/LB	1.039
		PHI	
		40.000	-0.1240
		40.000	-0.1780
MACH (1) = 1.555	BETAT (2) = -6.380	X/LB	1.039
		PHI	
		40.000	-0.0780
		40.000	-0.1240
MACH (1) = 1.555	BETAT (3) = -4.310	X/LB	1.039
		PHI	
		40.000	-0.1160
		40.000	-0.1370
MACH (1) = 1.555	BETAT (4) = -3.180	X/LB	1.039
		PHI	
		40.000	-0.1060
		40.000	-0.1350
MACH (2) = 1.555	BETAT (5) = 3.940	X/LB	1.039
		PHI	
		40.000	-0.0980
		40.000	-0.1290
MACH (3) = 1.555	BETAT (6) = 6.040	X/LB	1.039
		PHI	
		40.000	-0.1040
		40.000	-0.1490
MACH (3) = 1.555	BETAT (7) = 8.060	X/LB	1.039
		PHI	
		40.000	-0.1570
		40.000	-0.1620
MACH (2) = 2.000	BETAT (1) = -8.390	X/LB	1.039
		PHI	
		40.000	-0.1370
		40.000	-0.2100

AMES 97-707 1A9 Q2A + S3 + T9 BODY FLAP

(RBOF11)

## SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.340	X/LB	1.039
		PHI	
		.000	-.1500
		40.000	-.2050
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.280	X/LB	1.039
		PHI	
		.000	-.1250
		40.000	-.1280
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.180	X/LB	1.039
		PHI	
		.000	-.1120
		40.000	-.1220
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	X/LB	1.039
		PHI	
		.000	-.1350
		40.000	-.1370
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	X/LB	1.039
		PHI	
		.000	-.1190
		40.000	-.1420
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.040	X/LB	1.039
		PHI	
		.000	-.1100
		40.000	-.1680

ANES 97-707 1A9 02A \* S3 + T9 BODY FLAP

(RBOF12) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LPEF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

## SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.350	X/LB	PHI
		1.039	
		.000	-.0680
		40.000	-.1670

MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.310	X/LB	PHI
		1.039	
		.000	-.0540
		40.000	-.0930

MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.260	X/LB	PHI
		1.039	
		.000	-.0390
		40.000	-.0710

MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.170	X/LB	PHI
		1.039	
		.000	-.1190
		40.000	-.1400

MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.930	X/LB	PHI
		1.039	
		.000	-.0680
		40.000	-.1060

MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	X/LB	PHI
		1.039	
		.000	-.0920
		40.000	-.0930

MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.020	X/LB	PHI
		1.039	
		.000	-.1230
		40.000	-.1200

MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.320	X/LB	PHI
		1.039	
		.000	-.1190
		40.000	-.2100

## PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUFLR = .000

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 OEA + S3 + T9 BODY FLAP

(RBOF12)

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.280 X/LB 1.039  
 PHI .000 -.1310  
 40.000 -.2050

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.240 X/LB 1.039  
 PHI .000 -.1120  
 40.000 -.1270

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170 X/LB 1.039  
 PHI .000 -.0920  
 40.000 -.1110

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.920 X/LB 1.039  
 PHI .000 -.1180  
 40.000 -.1450

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.960 X/LB 1.039  
 PHI .000 -.1130  
 40.000 -.1470

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.010 X/LB 1.039  
 PHI .000 -.1060  
 40.000 -.1680

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A99

(RBOF13) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUDFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.310	X/LB PHI	1.039
		.000	-.0610
		40.000	-.1410
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.280	X/LB PHI	1.039
		.000	-.0240
		40.000	-.0250
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	X/LB PHI	1.039
		.000	-.0340
		40.000	-.0340
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.140	X/LB PHI	1.039
		.000	-.0730
		40.000	-.0730
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.940	X/LB PHI	1.039
		.000	-.0380
		40.000	-.0960
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.990	X/LB PHI	1.039
		.000	-.0460
		40.000	-.0650
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.030	X/LB PHI	1.039
		.000	-.1640
		40.000	-.0880
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.300	X/LB PHI	1.039
		.000	-.0710
		40.000	-.1750

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 Q2A + S3 + T9 BODY FLAP

(RBOF13)

## SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.260	X/LB	1.039
		PHI	
		.000	-.0890
		40.000	-.1530
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.220	X/LB	1.039
		PHI	
		.000	-.0760
		40.000	-.1000
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.140	X/LB	1.039
		PHI	
		.000	-.0750
		40.000	-.1040
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	X/LB	1.039
		PHI	
		.000	-.0880
		40.000	-.1210
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	X/LB	1.039
		PHI	
		.000	-.0820
		40.000	-.1260
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 9.020	X/LB	1.039
		PHI	
		.000	-.0630
		40.000	-.1230

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .03000 SCALE

## SECTION ( 1 ) BODY FLAP

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.300

X/LB 1.039  
 PHI .000  
 40.000 -0.0190  
 40.000 -0.0530

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.260

X/LB 1.039  
 PHI .000  
 40.000 -0.0100  
 40.000 -0.0120

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220

X/LB 1.039  
 PHI .000  
 40.000 -0.0440  
 40.000 -0.0160

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120

X/LB 1.039  
 PHI .000  
 40.000 -0.0470  
 40.000 -0.0710

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.950

X/LB 1.039  
 PHI .000  
 40.000 -0.0330  
 40.000 -0.0920

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000

X/LB 1.039  
 PHI .000  
 40.000 -0.0300  
 40.000 -0.0940

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.040

X/LB 1.039  
 PHI .000  
 40.000 -0.0340  
 40.000 -0.1520

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.290

X/LB 1.039  
 PHI .000  
 40.000 -0.0330  
 40.000 -0.1670

## PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUDEFLR = .000



(R80F14)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 Q2A + S3 + T9 BODY FLAP

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	X/LB	1.039
		PHI	.000
		40.000	-0.0470
		40.000	-0.1190
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.250	X/LB	1.039
		PHI	.000
		40.000	-0.0560
		40.000	-0.0890
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -2.130	X/LB	1.039
		PHI	.000
		40.000	-0.0580
		40.000	-0.0890
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.950	X/LB	1.039
		PHI	.000
		40.000	-0.0710
		40.000	-0.0970
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.990	X/LB	1.039
		PHI	.000
		40.000	-0.0700
		40.000	-0.1130
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.040	X/LB	1.039
		PHI	.000
		40.000	-0.0770
		40.000	-0.1080

AMES 97-707 1A9 OEA + S3 + T9 BODY FLAP

(RBOF15) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.3300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500  
 RUDDER = -15.000 ELEWON = .000  
 RUOFLR = .000

## SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.320	X/LB	1.039	PHI
		.000	-0.0130	
		40.000	-0.0630	
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.280	X/LB	1.039	PHI
		.000	-0.0240	
		40.000	.0370	
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.230	X/LB	1.039	PHI
		.000	-0.0360	
		40.000	.0070	
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -2.120	X/LB	1.039	PHI
		.000	-0.0310	
		40.000	-0.0580	
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.970	X/LB	1.039	PHI
		.000	-0.0420	
		40.000	-0.0760	
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.030	X/LB	1.039	PHI
		.000	-0.0410	
		40.000	-0.1060	
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.080	X/LB	1.039	PHI
		.000	-0.0320	
		40.000	-0.1450	
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -6.260	X/LB	1.039	PHI
		.000	-0.0370	
		40.000	-0.1100	

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

(RBOF15)

AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -4.210	X/LB	1.039
		PHI	
		.000	-.0390
		40.000	-.0990
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -.130	X/LB	1.039
		PHI	
		.000	-.0420
		40.000	-.0690
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.970	X/LB	1.039
		PHI	
		.000	-.0900
		40.000	-.0830
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 6.020	X/LB	1.039
		PHI	
		.000	-.0420
		40.000	-.1020
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.070	X/LB	1.039
		PHI	
		.000	-.0430
		40.000	-.0960

ANES 97-707 1A9 02A + S3 + T9 BODY FLAP

(RBOF16) ( 24 MAY 79 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) BODY FLAP

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.390

X/LB 1.039  
 PHI .000 .0040  
 40.000 -0.0350

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.290

X/LB 1.039  
 PHI .000 -0.0090  
 40.000 .0400

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240

X/LB 1.039  
 PHI .000 -0.0240  
 40.000 .0180

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -2.110

X/LB 1.039  
 PHI .000 -0.0200  
 40.000 -0.0460

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 4.000

X/LB 1.039  
 PHI .000 -0.0330  
 40.000 -0.0700

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.060

X/LB 1.039  
 PHI .000 -0.0360  
 40.000 -0.0950

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.120

X/LB 1.039  
 PHI .000 -0.0290  
 40.000 -0.1320

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.340

X/LB 1.039  
 PHI .000 .0400  
 40.000 .0400

## PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUDEFL = .000

DATE 21 SEP 73

ABSULATED PRESSURE DATA - 1A98

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AMES 97-737 1A9 02A + S3 + T9 BODY FLAP

(RBOF16)

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.270 X/LB 1.039  
PHI .000 -.0340  
40.000 -.0920

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220 X/LB 1.039  
PHI .000 -.0260  
40.000 -.0460

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.120 X/LB 1.039  
PHI .000 -.0270  
40.000 -.0720

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990 X/LB 1.039  
PHI .000 -.0400  
40.000 -.0710

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.050 X/LB 1.039  
PHI .000 -.0470  
40.000 -.0950

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.110 X/LB 1.039  
PHI .000 -.0420  
40.000 -.0920

AMES 97-707 1A9 OEA + S3 + T9 BODY FLAP

(RBOF17) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) BODY FLAP

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.410

X/LB 1.039  
 PHI .000  
 40.000 -1.530  
 40.000 -1.650

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.360

X/LB 1.039  
 PHI .000  
 40.000 -1.110  
 40.000 -1.130

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.300

X/LB 1.039  
 PHI .000  
 40.000 -0.910  
 40.000 -1.210

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -2.180

X/LB 1.039  
 PHI .000  
 40.000 -1.080  
 40.000 -1.310

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.930

X/LB 1.039  
 PHI .000  
 40.000 -1.070  
 40.000 -1.310

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990

X/LB 1.039  
 PHI .000  
 40.000 -1.080  
 40.000 -1.490

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.050

X/LB 1.039  
 PHI .000  
 40.000 -1.640  
 40.000 -1.470

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.380

X/LB 1.039  
 PHI .000  
 40.000 -1.400  
 40.000 -1.970

## PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .500  
 RUDDER = -10.000 ELEVON = .000  
 RUOFLR = .000

AMES 97-707 1A9 O2A + S3 + T9 BODY FLAP

(RBOF17)

## SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.330	X/LB	1.039
		PHI	
		.000	-.1440
		40.000	-.1690
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.280	X/LB	1.039
		PHI	
		.000	-.1260
		40.000	-.1160
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.170	X/LB	1.039
		PHI	
		.000	-.1200
		40.000	-.1150
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	X/LB	1.039
		PHI	
		.000	-.1390
		40.000	-.1320
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	X/LB	1.039
		PHI	
		.000	-.1510
		40.000	-.1560
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.040	X/LB	1.039
		PHI	
		.000	-.1460
		40.000	-.1530

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 ANES 97-707 1A9 02A + S3 + T9 BODY FLAP

(RBOF18) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500  
 RUDDER = -10.000 ELEVON = .050  
 RUOFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.340	X/LB	PHI
		1.039	.000
			40.000
			-.1570
			-.1450
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.300	X/LB	PHI
		1.039	.000
			40.000
			-.1070
			-.1050
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.250	X/LB	PHI
		1.039	.000
			40.000
			-.0560
			-.0870
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.160	X/LB	PHI
		1.039	.000
			40.000
			-.0820
			-.1300
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.930	X/LB	PHI
		1.039	.000
			40.000
			-.0640
			-.1390
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	X/LB	PHI
		1.039	.000
			40.000
			-.1120
			-.1340
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.020	X/LB	PHI
		1.039	.000
			40.000
			-.1280
			-.1290
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.320	X/LB	PHI
		1.039	.000
			40.000
			-.1210
			-.2030



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AMES 97-757 1A9 Q2A + S3 + T9 BODY FLAP

(RBOF18)

SECTION : 1) BODY FLAP

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.275

X/LB 1.039  
PHI  
.000 -.1320  
40.000 -.2000

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230

X/LB 1.039  
PHI  
.000 -.1100  
40.000 -.1210

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -2.160

X/LB 1.039  
PHI  
.000 -.1000  
40.000 -.1120

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.920

X/LB 1.039  
PHI  
.000 -.1320  
40.000 -.1420

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.960

X/LB 1.039  
PHI  
.000 -.1470  
40.000 -.1520

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.010

X/LB 1.039  
PHI  
.000 -.1230  
40.000 -.1590

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

(RBOF19) ( 24 MAY 73 )

AMES 97-707 1A9 OEA + S3 + T9 BODY FLAP

REFERENCE DATA

SREF = 2.4210 SR.FT. XMRP = 20.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

SECTION ( 1 ) BODY FLAP		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555	BETAT ( 1 ) = -6.320	X/LB	1.039
		PHI	.000
			-0.0940
			40.000 -0.1380
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.270	X/LB	1.039
		PHI	.000
			-0.0690
			40.000 -0.0750
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	X/LB	1.039
		PHI	.000
			-0.0410
			40.000 -0.0570
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -1.140	X/LB	1.039
		PHI	.000
			-0.0630
			40.000 -0.1160
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.950	X/LB	1.039
		PHI	.000
			-0.0510
			40.000 -0.1190
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.990	X/LB	1.039
		PHI	.000
			-0.0490
			40.000 -0.1070
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.040	X/LB	1.039
		PHI	.000
			-0.0630
			40.000 -0.1330
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -6.300	X/LB	1.039
		PHI	.000
			-0.0998
			40.000 -0.1570

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUDFLR = .000

(RBOF19)

DATE 21 SEP 72 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 O2A + S3 + T9 BODY FLAP

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) BODY FLAP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.260	X/LB	1.039
		PHI	
		.000	-.0990
		40.000	-.1450
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.220	X/LB	1.039
		PHI	
		.000	-.0780
		40.000	-.0990
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.140	X/LB	1.039
		PHI	
		.000	-.0960
		40.000	-.1020
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	X/LB	1.039
		PHI	
		.000	-.0690
		40.000	-.1250
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	X/LB	1.039
		PHI	
		.000	-.1040
		40.000	-.1350
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.020	X/LB	1.039
		PHI	
		.000	-.1040
		40.000	-.1350

AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

(RBOF20) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 98.FT. XGRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YGRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZGRP = .0000 INCHES  
 SCALE = .0300 SCALE

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -6.300	X/LB	PHI
		1.039	.000
			-0.0420
		40.000	-0.0950
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.270	X/LB	PHI
		1.039	.000
			-0.0120
		40.000	-0.0130
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.220	X/LB	PHI
		1.039	.000
			-0.0380
		40.000	-0.0190
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.130	X/LB	PHI
		1.039	.000
			-0.0320
		40.000	-0.0790
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.960	X/LB	PHI
		1.039	.000
			-0.0470
		40.000	-0.0930
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.010	X/LB	PHI
		1.039	.000
			-0.0290
		40.000	-0.0980
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 6.060	X/LB	PHI
		1.039	.000
			-0.0610
		40.000	-0.1490
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -0.260	X/LB	PHI
		1.039	.000
			-0.0710
		40.000	-0.1720

## PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUOFLR = .000

A

AMES 97-707 1A9 ORA + S3 + T9 BODY FLAP

(RBOF20)

## SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.240 X/LB 1.039  
PHI .000 -.0660  
40.000 -.1400

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200 X/LB 1.039  
PHI .000 -.0610  
40.000 -.0800

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.130 X/LB 1.039  
PHI .000 -.0790  
40.000 -.0860

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990 X/LB 1.039  
PHI .000 -.0900  
40.000 -.1060

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.990 X/LB 1.039  
PHI .000 -.1000  
40.000 -.1180

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040 X/LB 1.039  
PHI .000 -.0940  
40.000 -.1100

AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

(RBOF21) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 26.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUDFLR = .000

## SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -0.330	X/LB	1.039
		PHI	
			.000
			40.000
			-.0290
			-.0760
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -0.290	X/LB	1.039
		PHI	
			.000
			40.000
			-.0220
			.0080
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -0.230	X/LB	1.039
		PHI	
			.000
			40.000
			-.0310
			-.0120
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.120	X/LB	1.039
		PHI	
			.000
			40.000
			-.0470
			-.0680
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.980	X/LB	1.039
		PHI	
			.000
			40.000
			-.0380
			-.0930
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.040	X/LB	1.039
		PHI	
			.000
			40.000
			-.0300
			-.1140
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 0.110	X/LB	1.039
		PHI	
			.000
			40.000
			-.0700
			-.1460
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -0.310	X/LB	1.039
		PHI	
			.000
			40.000
			-.0620
			-.1630

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AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

(RBOF21)

SECTION ( 1 ) BODY FLAP  
DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260  
X/LB 1.039  
PHI  
.000 -.0600  
40.000 -.1380

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210  
X/LB 1.039  
PHI  
.000 -.0480  
40.000 -.0910

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.120  
X/LB 1.039  
PHI  
.000 -.0460  
40.000 -.0660

MACH ( 2 ) = 2.044 BETAT ( 5 ) = 3.970  
X/LB 1.039  
PHI  
.000 -.0740  
40.000 -.0910

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.020  
X/LB 1.039  
PHI  
.000 -.0940  
40.000 -.1050

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.070  
X/LB 1.039  
PHI  
.000 -.0820  
40.000 -.0970

(RBOF22) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .000  
RUDDER = -10.000 ELEVON = .000  
RUOFLR = .000

TABULATED PRESSURE DATA - 1A9B

AVES 97-707 1A9 02A + S3 + T9 BODY FLAP

REFERENCE DATA

SREF = 2.4210 SQ.FT. XGRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YGRP = .0000 INCHES  
BREF = 39.8490 INCHES ZGRP = .0000 INCHES  
SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.360	X/LB	PHI
		1.039	
		.000	-.0060
		40.000	-.0470
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.310	X/LB	PHI
		1.039	
		.000	-.0100
		40.000	.0240
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.230	X/LB	PHI
		1.039	
		.000	-.0280
		40.000	.0100
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.110	X/LB	PHI
		1.039	
		.000	-.0320
		40.000	-.0510
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.940	X/LB	PHI
		1.039	
		.000	-.0290
		40.000	-.0720
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.060	X/LB	PHI
		1.039	
		.000	-.0250
		40.000	-.1040
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.120	X/LB	PHI
		1.039	
		.000	-.0410
		40.000	-.1370
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.330	X/LB	PHI
		1.039	
		.000	-.0490
		40.000	-.1580



(RBOF22)

DATE 21 SEP 72  
 TADJUSTED PROSJE LIFE DATA - 1A98  
 AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -5.280  
 X/LB 1.039  
 PHI  
 .000 -0.0420  
 40.000 -0.1150

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.220  
 X/LB 1.039  
 PHI  
 .000 -0.0360  
 40.000 -0.0850

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -3.160  
 X/LB 1.030  
 PHI  
 .000 -0.0310  
 40.000 -0.0690

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 4.000  
 X/LB 1.039  
 PHI  
 .000 -0.0620  
 40.000 -0.0770

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.150  
 X/LB 1.039  
 PHI  
 .000 -0.0670  
 40.000 -0.1020

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.310  
 X/LB 1.039  
 PHI  
 .000 -0.0600  
 40.000 -0.1920

### PARAMETRIC DATA

ALPHAT =	-8.000	ORBINC =	.000
RUDDER =	15.000	ELEVON =	.000
RUSFLR =	.000		

## REFERENCE DATA

SERF = 2.4210 99.17.      XGRP = .0000 100.00  
 LREF = 39.0490 INCHES      YGRP = .0000 100.00  
 BREF = 39.0490 INCHES      ZGRP = .0000 100.00  
 SCALE = .0000 SCALE

SECTION 1.1 BODY FLAP

	WACH ( 1 ) =	1.555	BETAT ( 1 ) =	-8.400	X/LB	1.039
					PMI	

NUC4 ( 1 ) = 1.555	BETAT ( 2 ) = -6.360	X/LB	1.039
		PHI	
		.000	-.1290
		40.000	-.1220

MACRO ( 1 ) = 1.555	BETAT ( 3 ) = -4.250	X/LB	1.039
		PHI	
		.000	-.1230
		40.000	-.1320

COO+ ( 3 ) = 1.555	BETAT ( 4 ) = -.170	X/LB	1.039
		PHI	.000
			-.1370
		40.000	-.1490

MOCH	( 1 ) = 1.595	BETAT ( 5 ) = 3.940	X/LB	1.039
			PHI	
				.000
				-.0000
				-.0000
				-.0000

WACH	( 3 ) = 1.955	BETAT ( 6 ) = 8.1680	X/LB	1.039
			PHI	
				-.1820
				-.1877

$\text{X/LB}$	1.139
PMT	- .1425
	.1645
	- .1870
	.1245

WAGON ( 2 ) = 2.000	BETAT ( 2 ) = -6.330	%LB	1.039
		PHI	
			-1.671
			40.920
			-1910

(RBOF23)

SECTION 10500 FLAP  
WACH (1) = 2.0000 COTAT (1) = -1.0000  
WACH (2) = 2.0000 COTAT (2) = -1.0000  
WACH (3) = 2.0000 COTAT (3) = -1.0000  
WACH (4) = 2.0000 COTAT (4) = -1.0000  
WACH (5) = 2.0000 COTAT (5) = -1.0000

DEPENDENT VARIABLE CP

X/LB	1.039
PHI	
.0000	-.1260
40.0000	-.1210
X/LB	1.039
PHI	
.0000	-.1240
40.0000	-.1190
X/LB	1.039
PHI	
.0000	-.1400
40.0000	-.1280
X/LB	1.039
PHI	
.0000	-.1480
40.0000	-.1500
X/LB	1.039
PHI	
.0000	-.1450
40.0000	-.1480

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .03000 SCALE

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.330	X/LB	1.039	PHI	.000	-.1650	40.000	-.1580
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.290	X/LB	1.039	PHI	.000	-.1220	40.000	-.1060
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	X/LB	1.039	PHI	.000	-.0510	40.000	-.1000
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.150	X/LB	1.039	PHI	.000	-.1270	40.000	-.1390
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.940	X/LB	1.039	PHI	.000	-.0560	40.000	-.1310
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	X/LB	1.039	PHI	.000	-.0670	40.000	-.1390
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.030	X/LB	1.039	PHI	.000	-.1510	40.000	-.1140
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.310	X/LB	1.039	PHI	.000	-.1250	40.000	-.1990

PARAMETRIC DATA

ALPHAT = -4.140 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUDFLR = .000

(RBOF24)

COMPUTED PRESSURE DATA - 1A98

AMES 87-707 1A9 02A + 33 + 79 BODY FLAP

DEPENDENT VARIABLE CP

SECTION: BODY FLAP

MAC	2 = 2.000	SEAT 2) = -0.070	X/LB	1.039
			PHI	
			.000	-.1391
			40.000	-.1825
MAC	2 = 2.000	SEAT (3) = -0.130	X/LB	1.039
			PHI	
			.000	-.1799
			40.000	-.1260
MAC	2 = 2.000	SEAT (2) = -0.100	X/LB	1.039
			PHI	
			.000	-.1020
			40.000	-.1150
MAC	2 = 2.000	SEAT (3) = -0.100	X/LB	1.039
			PHI	
			.000	-.1300
			40.000	-.1320
MAC	2 = 2.000	SEAT (3) = -0.100	X/LB	1.039
			PHI	
			.000	-.1440
			40.000	-.1510
MAC	2 = 2.000	SEAT (3) = -0.100	X/LB	1.039
			PHI	
			.000	-.1310
			40.000	-.1590

AMES 97-707 1A9 O2A + S3 + T9 BODY FLAP

(RBOF25) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XGRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YGRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZGRP = .0000 INCHES  
 SCALE = .0900 SCALE

## PARAMETRIC DATA

ALPHAT = .000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUDFLR = .000

## SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.320	X/LB	PHI
		1.039	
		.000	-.0920
		40.000	-.1370
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.270	X/LB	PHI
		1.039	
		.000	-.0540
		40.000	-.0630
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	X/LB	PHI
		1.039	
		.000	-.0500
		40.000	-.0530
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.130	X/LB	PHI
		1.039	
		.000	-.0540
		40.000	-.1090
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.950	X/LB	PHI
		1.039	
		.000	-.0430
		40.000	-.1180
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.990	X/LB	PHI
		1.039	
		.000	-.0470
		40.000	-.0990
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.040	X/LB	PHI
		1.039	
		.000	-.1090
		40.000	-.1130
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.290	X/LB	PHI
		1.039	
		.000	-.1050
		40.000	-.1420

(RBOF25)

DATE 21 SEP 7.

TABULATED PRESSURE DATA - 1A98

APES 97-707 1A9 02A + S3 + T9 BODY FLAP

SECTION (1) BODY FLAP

DEPENDENT VARIABLE CP

MACH (2) = 2.000 BETAT (2) = -5.250

X/LB 1.039  
PHI  
.000  
40.000  
-0.0810  
-0.1260

MACH (2) = 2.000 BETAT (2) = -4.210

X/LB 1.039  
PHI  
.000  
40.000  
-0.0860  
-0.0970

MACH (2) = 2.000 BETAT (2) = -3.170

X/LB 1.039  
PHI  
.000  
40.000  
-0.0950  
-0.0980

MACH (2) = 2.000 BETAT (2) = -2.130

X/LB 1.039  
PHI  
.000  
40.000  
-0.0940  
-0.1040

MACH (2) = 2.000 BETAT (2) = -1.090

X/LB 1.039  
PHI  
.000  
40.000  
-0.0970  
-0.1340

AMES 97-707 1A9 02A + 53 + T9 BODY FLAP

(RBOF26) ( 24 MAY 73 )

## REFERENCE DATA

SROF = 2.4210 36.FT.      YGRP = 28.5300 INCHES  
 LWRP = 39.0490 INCHES      YGRP = .0000 INCHES  
 BGRP = 39.0490 INCHES      ZGRP = .0000 INCHES  
 SCALZ = .0350 SCALF

**SECTION ( 1 ) BODY FLAP**

## DEPENDENT VARIABLE CP

**PMCH ( 1 ) = 1.555 BETAT ( 1 ) = -0.300**

X/LB	1.009
PHI	
	.000
40.000	-.0410
	-.0970

**MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.250**

W/LB	1.039
FH3	
	-.0179
	-.0060

**NUC4 ( 1 ) = 1.555 BETAT ( 3 ) = -4.220**

100/LB	1.039
PHI	
.000	-.0340
100.000	-.0150

**ALPHA ( 1 ) = 1.995    BETAT ( 4 ) = -.1250**

14	1.000
600.1	1.000

$$\text{MCHT} (1) = 1.555 \quad \text{BETAT} (5) = 3.960$$

7LB	1.039
16	
.000	-.0370
0.000	-.0020

**MACH ( 1 ) = 1.999 BETAT ( 6 ) = 6.010**

97B	1.039
11	
.000	-.0170
.000	-.0090

$$\text{MACH} (1) = 1.555 \text{ BETAT} (7) = 8.050$$

1.039  
- .0310  
- .1480

**WACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.283**

	1.039
	- .0630
	1.620



ABULATED PRESSURE DATA - 1A98

(R80F26)

AMES 97-707 1A9 02A + S3 + T9 BODY FLAP

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -0.230 X/LB 1.039  
PHI  
.000 -0.0650  
40.000 -0.1410

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -0.250 X/LB 1.039  
PHI  
.000 -0.0640  
40.000 -0.0820

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -0.270 X/LB 1.039  
PHI  
.000 -0.0690  
40.000 -0.0870

MACH ( 2 ) = 2.000 BETAT ( 5 ) = -0.290 X/LB 1.039  
PHI  
.000 -0.0730  
40.000 -0.0910

MACH ( 2 ) = 2.000 BETAT ( 6 ) = -0.300 X/LB 1.039  
PHI  
.000 -0.0680  
40.000 -0.1170

MACH ( 2 ) = 2.000 BETAT ( 7 ) = -0.300 X/LB 1.039  
PHI  
.000 -0.1050  
40.000 -0.1130

ANES 97-707 1A9 02A + S3 + T9 BODY FLAP

(RBOF27) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT.    YMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES    YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES    ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) BODY FLAP

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555    BETAT ( 1 ) = -8.330

X/LB 1.039  
 PHI .000  
 40.000 -.0250  
 40.000 -.0800

MACH ( 1 ) = 1.555    BETAT ( 2 ) = -6.278

X/LB 1.039  
 PHI .000  
 40.000 -.0250  
 40.000 .0130

MACH ( 1 ) = 1.555    BETAT ( 3 ) = -4.230

X/LB 1.039  
 PHI .000  
 40.000 -.0328  
 40.000 -.0080

MACH ( 1 ) = 1.555    BETAT ( 4 ) = -.110

X/LB 1.039  
 PHI .000  
 40.000 -.0378  
 40.000 -.0688

MACH ( 1 ) = 1.555    BETAT ( 5 ) = 3.990

X/LB 1.039  
 PHI .000  
 40.000 -.0350  
 40.000 -.0790

MACH ( 1 ) = 1.555    BETAT ( 6 ) = 6.080

X/LB 1.039  
 PHI .000  
 40.000 -.0280  
 40.000 -.1030

MACH ( 1 ) = 1.555    BETAT ( 7 ) = 8.080

X/LB 1.039  
 PHI .000  
 40.000 -.0310  
 40.000 -.1450

MACH ( 2 ) = 2.000    BETAT ( 1 ) = -8.300

X/LB 1.039  
 PHI .000  
 40.000 -.0560  
 40.000 -.1700

## PARAMETRIC DATA

ALPHAT = 6.000    ORBINC = .000  
 RUDDER = 15.000    ELEVON = .000  
 RUDFLR = .000

(RBOF27)

QUANT 21 SEE 10  
 CALCULATED PRESSURE DATA - 1A98  
 VER 97-707 1A9 Q2A + S3 + TO BODY FLAP

SECTION (1) BODY FLAP  
 DEPENDENT VARIABLE CP

MACH (2) = 2.000 BETAT (2) = -6.150  
 X/LB 1.039  
 PHI .000 -.0080  
 40.000 -.1370

MACH (2) = 2.000 BETAT (3) = -4.200  
 X/LB 1.039  
 PHI .000 -.0080  
 40.000 -.0900

MACH (2) = 2.000 BETAT (4) = -.120  
 X/LB 1.039  
 PHI .000 -.0020  
 40.000 -.0630

MACH (2) = 2.000 BETAT (5) = 3.970  
 X/LB 1.039  
 PHI .000 -.0080  
 40.000 -.0840

MACH (2) = 2.000 BETAT (6) = 6.030  
 X/LB 1.039  
 PHI .000 -.0040  
 40.000 -.0970

MACH (2) = 2.000 BETAT (7) = 8.070  
 X/LB 1.039  
 PHI .000 -.0040  
 40.000 -.1010

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

(RBOF28) ( 24 MAY 73 )

ANES 97-707 1A9 02A + 93 + T9 BODY FLAP

PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .000  
RUDDER = 15.000 ELEVON = .000  
RUOFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XGRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YGRP = .0000 INCHES  
BREF = 39.8490 INCHES ZGRP = .0000 INCHES  
SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) BODY FLAP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.350	X/LB PHI	1.039
		.000	-.0229
		40.000	-.0460
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.300	X/LB PHI	1.039
		.000	-.0140
		40.000	.0150
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.250	X/LB PHI	1.039
		.000	-.0190
		40.000	.0070
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.110	X/LB PHI	1.039
		.000	-.0260
		40.000	-.0520
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 4.000	X/LB PHI	1.039
		.000	-.0150
		40.000	-.0640
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.060	X/LB PHI	1.039
		.000	-.0230
		40.000	-.0920
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.150	X/LB PHI	1.039
		.000	-.0210
		40.000	-.1330
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.320	X/LB PHI	1.039
		.000	-.0470
		40.000	-.1620

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 ORA + S3 + T9 BODY FLAP (RBOF28)

SECTION ( 1 ) BODY FLAP DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.260	X/LB	1.039
		PHI	
		.000	-.0350
		40.000	-.1140
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.210	X/LB	1.039
		PHI	
		.000	-.0240
		40.000	-.0760
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -1.110	X/LB	1.039
		PHI	
		.000	-.0240
		40.000	-.0650
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 0.090	X/LB	1.039
		PHI	
		.000	-.0490
		40.000	-.0690
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.050	X/LB	1.039
		PHI	
		.000	-.0600
		40.000	-.0800
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.110	X/LB	1.039
		PHI	
		.000	-.0780
		40.000	-.0930

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A58

(RECORD 1) ( 24 MAY 73 )

ANES 97-707 1AS OBA + S3 + 19 OMS POD OUTSIDE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 28.1300 INCHES  
 LREF = 39.8490 INCHES YREF = .0000 INCHES  
 BREF = 39.8490 INCHES ZREF = .0000 INCHES  
 SCALE = .0000 SCALE

SECTION ( 1 ) OMS POD OUTSIDE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	ALPHAT( 1 ) = -8.400	X/LB	1.001	PHI	.0180
		110.000			
		120.000			-.0040
MACH ( 1 ) = 1.555	ALPHAT( 2 ) = -6.330	X/LB	1.001	PHI	-.0350
		110.000			
		120.000			-.0160
MACH ( 1 ) = 1.555	ALPHAT( 3 ) = -4.250	X/LB	1.001	PHI	.0090
		110.000			
		120.000			-.0210
MACH ( 1 ) = 1.555	ALPHAT( 4 ) = -2.180	X/LB	1.001	PHI	-.0960
		110.000			
		120.000			-.0720
MACH ( 1 ) = 1.555	ALPHAT( 5 ) = -.120	X/LB	1.001	PHI	-.0360
		110.000			
		120.000			-.0740
MACH ( 1 ) = 1.555	ALPHAT( 6 ) = 1.990	X/LB	1.001	PHI	-.0740
		110.000			
		120.000			-.1160
MACH ( 1 ) = 1.555	ALPHAT( 7 ) = 4.010	X/LB	1.001	PHI	-.0740
		110.000			
		120.000			-.1230
MACH ( 1 ) = 1.555	ALPHAT( 8 ) = 6.080	X/LB	1.001	PHI	-.0740
		110.000			
		120.000			-.1230

PARAMETRIC DATA

BETAT = .000 ORBINC = .900  
 RUDDER = .000 ELEVON = .000  
 RUDDLR = .000

DATE 21 SEP 73

RELATED PRESSURE DATA - 1A9B  
 AMES 97-707 1A9 OGA + S3 + T9 OWS POD OUTSIDE

(RBOM01)

DEPENDENT VARIABLE CP

SECTION ( 1 ) POD OUTSIDE

MACH ( 1 ) = 1.555 ALPHAT( 9 ) = 8.130  
 X/LB 1.001  
 PHI 110.000 -.0880  
 120.000 -.1100

MACH ( 2 ) = 2.000 ALPHAT( 1 ) = -0.360  
 X/LB 1.001  
 PHI 110.000 .0760  
 120.000 .0610

MACH ( 2 ) = 2.000 ALPHAT( 2 ) = -6.310  
 X/LB 1.001  
 PHI 110.000 .0620  
 120.000 .0480

MACH ( 2 ) = 2.000 ALPHAT( 3 ) = -4.250  
 X/LB 1.001  
 PHI 110.000 .0540  
 120.000 .0380

MACH ( 2 ) = 2.000 ALPHAT( 4 ) = -2.210  
 X/LB 1.001  
 PHI 110.000 .0550  
 120.000 .0380

MACH ( 2 ) = 2.000 ALPHAT( 5 ) = -1.160  
 X/LB 1.001  
 PHI 110.000 .0540  
 120.000 .0390

MACH ( 2 ) = 2.000 ALPHAT( 6 ) = 1.890  
 X/LB 1.001  
 PHI 110.000 .0510  
 120.000 .0310

MACH ( 2 ) = 2.000 ALPHAT( 7 ) = 3.930  
 X/LB 1.001  
 PHI 110.000 .0520  
 120.000 .0320

MACH ( 2 ) = 2.000 ALPHAT( 8 ) = 5.980  
 X/LB 1.001  
 PHI 110.000 .0560  
 120.000 .0340

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

PAGE 584

AMES 97-707 1A9 ORA + S3 + T9 ORS PCD OUTSIDE

(R80401)

SECTION ( 110RS PCD OUTSIDE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.0000	ALPHAT ( 9 ) = 8.020	X/LB	1.001
		PMI	
		110.000	.0400
		120.000	.0300



TIME 01 SEP 73

RELATED PRESSURE DATA - 1A98  
ANES 97-707 1A9 OBA + S3 + T9 OMS POC OUTSIDE

(RBOM2) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500  
RUDDER = .000 ELEVON = .000  
RUDEFL = .000

REFINED DATA

STEP = 2.4210 INCHES XMRP = 28.3300 INCHES  
LREF = 39.8490 INCHES YMRP = 1.0000 INCHES  
BREF = 39.8490 INCHES ZMRP = 1.0000 INCHES  
SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS POC OUTSIDE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.140  
X/LB 1.001  
PHI 110.000  
120.000 -0.0420  
120.000 -0.1080

MACH ( 2 ) = 1.555 BETAT ( 2 ) = -9.100  
X/LB 1.001  
PHI 110.000  
120.000 -0.0950  
120.000 -0.1180

MACH ( 3 ) = 1.555 BETAT ( 3 ) = -9.050  
X/LB 1.001  
PHI 110.000  
120.000 -0.1010  
120.000 -0.1280

MACH ( 4 ) = 1.555 BETAT ( 4 ) = 5.110  
X/LB 1.001  
PHI 110.000  
120.000 -0.0810  
120.000 -0.1320

MACH ( 5 ) = 1.555 BETAT ( 5 ) = 7.140  
X/LB 1.001  
PHI 110.000  
120.000 -0.0730  
120.000 -0.1750

MACH ( 6 ) = 1.555 BETAT ( 6 ) = 9.100  
X/LB 1.001  
PHI 110.000  
120.000 -0.1270  
120.000 -0.1870

MACH ( 7 ) = 2.000 BETAT ( 1 ) = -8.320  
X/LB 1.001  
PHI 110.000  
120.000 .1540  
120.000 .0630

MACH ( 8 ) = 2.000 BETAT ( 2 ) = -6.270  
X/LB 1.001  
PHI 110.000  
120.000 .0670  
120.000 -0.0140

986 7994  
JULI 808

GATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(R80M22)

AVES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE

SECTION ( 1 ) OMS POD OUTSIDE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.210	X/LB	1.001
		PHI	
		110.000	.1130
		120.000	-.0090
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.990	X/LB	1.001
		PHI	
		110.000	.0640
		120.000	-.0900
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 6.060	X/LB	1.001
		PHI	
		110.000	.0190
		120.000	-.0630
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.120	X/LB	1.001
		PHI	
		110.000	.0720
		120.000	-.0090

DATE 21 SEP 73

ABLATED PRESSURE DATA - 1A98

AXES 97-707 1A9 CEA + S3 + T9 OMS POD OUTSIDE

(RBM03) ( 24 MAR 73 )

PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500  
RUDDER = .000 ELEVON = .000  
RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 19.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0304 SCALE

DEPENDENT VARIABLE CP

SECTION 1: OMS POD OUTSIDE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.120  
X/LB 1.001  
PHI  
110.000 -.0560  
120.000 -.0800

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070  
X/LB 1.001  
PHI  
110.000 -.0800  
120.000 -.0670

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -2.050  
X/LB 1.001  
PHI  
110.000 -.0380  
120.000 -.0970

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.080  
X/LB 1.001  
PHI  
110.000 .0030  
120.000 -.0470

MACH ( 2 ) = 1.555 BETAT ( 5 ) = 7.110  
X/LB 1.001  
PHI  
110.000 -.0640  
120.000 -.1640

MACH ( 2 ) = 1.555 BETAT ( 6 ) = 9.140  
X/LB 1.001  
PHI  
110.000 -.0990  
120.000 -.1670

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.300  
X/LB 1.001  
PHI  
110.000 .1010  
120.000 .0240

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250  
X/LB 1.001  
PHI  
110.000 .1320  
120.000 .0160

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A88

(RBD003)

AMES 97-707 IAS ORA + 53 + TS OMS POD OUTSIDE

SECTION ( 1 ) OMS POD OUTSIDE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.280	X/LB	1.001
		PHI	
		110.000	.0750
		120.000	-.0240
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.970	X/LB	1.001
		PHI	
		110.000	.0240
		120.000	-.0340
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 6.030	X/LB	1.001
		PHI	
		110.000	-.0240
		120.000	-.0590
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.080	X/LB	1.001
		PHI	
		110.000	.0680
		120.000	-.0090

(RBOH24) ( 24 MAY 75 )

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 OCA + S3 + T9 OMS POD OUTSIDE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0340 SCALE

DEPENDENT VARIABLE OF

SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -7.090	X/LB	1.001
		PHI	
		110.000	.0510
		120.000	-.0040
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -5.070	X/LB	1.001
		PHI	
		110.000	-.0630
		120.000	-.0380
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.040	X/LB	1.001
		PHI	
		110.000	-.0630
		120.000	-.0690
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.060	X/LB	1.001
		PHI	
		110.000	-.0400
		120.000	-.0600
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.080	X/LB	1.001
		PHI	
		110.000	-.0620
		120.000	-.1320
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.100	X/LB	1.001
		PHI	
		110.000	-.0550
		120.000	-.1350
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.270	X/LB	1.001
		PHI	
		110.000	.1410
		120.000	.0270
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.240	X/LB	1.001
		PHI	
		110.000	.1250
		120.000	.0690

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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ANES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE

(RBOMD4)

SECTION ( 1 ) OMS POD OUTSIDE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.200	X/LB	1.001
		PHI	
		110.000	.0990
		120.000	-.0170
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.990	X/LB	1.001
		PHI	
		110.000	.0929
		120.000	-.0460
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.990	X/LB	1.001
		PHI	
		110.000	.0090
		120.000	-.0640
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.090	X/LB	1.001
		PHI	
		110.000	.0680
		120.000	-.0280

DATE 21 SEP 73

REBULATED PRESSURE DATA - 1A98

ANES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

SECTION ( 1 ) OMS POD OUTSIDE

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.100 X/LB 1.001  
 PHI  
 110.000 -.0290  
 120.000 .0520

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070 X/LB 1.001  
 PHI  
 110.000 -.0900  
 120.000 -.0410

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050 X/LB 1.001  
 PHI  
 110.000 -.0780  
 120.000 -.0450

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.050 X/LB 1.001  
 PHI  
 110.000 -.0400  
 120.000 -.0680

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.070 X/LB 1.001  
 PHI  
 110.000 -.0980  
 120.000 -.1150

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.090 X/LB 1.001  
 PHI  
 110.000 -.0940  
 120.000 -.1580

MACH ( 2 ) = 2.140 BETAT ( 1 ) = -8.690 X/LB 1.001  
 PHI  
 110.000 .1250  
 120.000 .0400

MACH ( 2 ) = 2.140 BETAT ( 2 ) = -6.250 X/LB 1.001  
 PHI  
 110.000 .1090  
 120.000 .0180

PARAMETRIC DATA

ALPHAT = 2.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUOFLR = .000

(RBOHLS)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

ANES 97-707 IAS OSA + S3 + T9 OMS POD OUTSIDE

SECTION ( 1 ) OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.140	X/LB	1.001
		PHI	
		110.000	.0820
		120.000	.0650
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.940	X/LB	1.001
		PHI	
		110.000	.0590
		120.000	-.0450
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.960	X/LB	1.001
		PHI	
		110.000	.0610
		120.000	-.0530
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.020	X/LB	1.001
		PHI	
		110.000	-.0440
		120.000	-.0660



DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-757 1A9 02A + S3 + T9 OMS POD OUTSIDE (RBOH6) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500  
RUDDER = .000 ELEVON = .000  
RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.100  
X/LB 1.001  
PHI 110.000  
120.000 .0070  
120.000 .0550

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.080  
X/LB 1.001  
PHI 110.000  
120.000 .0090  
120.000 -.0060

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.060  
X/LB 1.001  
PHI 110.000  
120.000 -.0510  
120.000 .0170

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.090  
X/LB 1.001  
PHI 110.000  
120.000 -.0190  
120.000 -.0610

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.080  
X/LB 1.001  
PHI 110.000  
120.000 -.0540  
120.000 -.1180

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.090  
X/LB 1.001  
PHI 110.000  
120.000 -.0630  
120.000 -.1120

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.290  
X/LB 1.001  
PHI 110.000  
120.000 .1280  
120.000 .0380

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.290  
X/LB 1.001  
PHI 110.000  
120.000 .0970  
120.000 .1840

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
ANES 97-707 1A9 02A + 53 + 79 OMS FOR OUTSIDE

(R80M06)

SECTION ( 1 ) OMS FOR OUTSIDE

DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -.130	1/LB 1.001
	PHI
	110.000 .0510
	120.000 .0328
MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.850	1/LB 1.001
	PHI
	110.000 .0540
	120.000 -.0450
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.980	1/LB 1.001
	PHI
	110.000 .0567
	120.000 -.0550

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 CEA + S3 + T9 OMS POD OUTSIDE

(R00007) , ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -2.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUOFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.110  
 X/LB 1.001  
 PHI 110.000 .0490  
 120.000 .0340

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.090  
 X/LB 1.001  
 PHI 110.000 .0530  
 120.000 .0450

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.070  
 X/LB 1.001  
 PHI 110.000 .0170  
 120.000 .0090

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.040  
 X/LB 1.001  
 PHI 110.000 .0160  
 120.000 -.0610

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.060  
 X/LB 1.001  
 PHI 110.000 -.0270  
 120.000 -.1020

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.080  
 X/LB 1.001  
 PHI 110.000 -.0690  
 120.000 -.0850

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.310  
 X/LB 1.001  
 PHI 110.000 .1330  
 120.000 .1230

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.280  
 X/LB 1.001  
 PHI 110.000 .1000  
 120.000 .0800

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 02A + S3 + T9 CMS POD OUTSIDE

(RBOARD)

SECTION ( 1 ) CMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.230	X/LB	1.001
		PHI	
		110.000	.0820
		120.000	.0690
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.940	X/LB	1.001
		PHI	
		110.000	.0960
		120.000	-.0350
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.970	X/LB	1.001
		PHI	
		110.000	.0730
		120.000	-.0460
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.010	X/LB	1.001
		PHI	
		110.000	.0710
		120.000	-.0630

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1498

AHES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0720 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0740 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS POD OUTSIDE		X/LB		PHI	
MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.130	X/LB	1.001	PHI	
		110.000	.1010		
		120.000	.0910		
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.150	X/LB	1.001	PHI	
		110.000	.0610		
		120.000	.0550		
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -3.070	X/LB	1.001	PHI	
		110.000	.0120		
		120.000	-.0020		
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.030	X/LB	1.001	PHI	
		110.000	.0140		
		120.000	.0480		
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.090	X/LB	1.001	PHI	
		110.000	-.0340		
		120.000	-.0710		
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 9.070	X/LB	1.001	PHI	
		110.000	-.0300		
		120.000	-.0820		
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.310	X/LB	1.001	PHI	
		110.000	.1240		
		120.000	.1110		
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	X/LB	1.001	PHI	
		110.000	.1010		
		120.000	.0910		

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUDELR = .000

(RDOMS8)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A98  
 ANES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE

SECTION ( 1 ) OMS POD OUTSIDE      DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.230	X/LB	1.001
		PMI	
		110.000	.0790
		120.000	.0630
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.920	X/LB	1.001
		PMI	
		110.000	.0560
		120.000	-.0240
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 5.960	X/LB	1.001
		PMI	
		110.000	.0720
		120.000	-.0510
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.010	X/LB	1.001
		PMI	
		110.000	.0720
		120.000	-.0620

DATE 21 SEP 73

ABULATED PRESSURE DATA - 1A98

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AVES 97-707 1A9 Q2A + S3 + T9 QMS F30 OUTSIDE

(RBMF9) ( 24 MAY 73 )

# REFERENCE DATA

SPEF = 2.4210 SQ.FT. XMF = 20.9310 INCHES  
 LREF = 39.9490 INCHES YMF = 10.010 INCHES  
 BREF = 39.8490 INCHES ZMF = 10.010 INCHES  
 SCALE = .0310 SCALE

# PARAMETRIC DATA

ALPHAT = -6.0000 OFBINC = .5000  
 RUDDER = .0000 ELEVON = .0000  
 RUDFLR = .0000

# SECTION ( 1 ) QMS F30 OUTSIDE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.160  
 X/LB 1.000  
 PHI .1050  
 120.000 .1050  
 120.000 .1050

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.170  
 X/LB 1.000  
 PHI .0670  
 120.000 .0670  
 120.000 .0590

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.180  
 X/LB 1.000  
 PHI .0310  
 120.000 .0310  
 120.000 .0220

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 3.640  
 X/LB 1.000  
 PHI -.0050  
 120.000 -.0050  
 120.000 -.0740

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 5.690  
 X/LB 1.000  
 PHI .0190  
 120.000 .0190  
 120.000 -.0450

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 7.740  
 X/LB 1.000  
 PHI .0130  
 120.000 .0130  
 120.000 -.0980

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.340  
 X/LB 1.000  
 PHI .1380  
 120.000 .1380  
 120.000 .1290

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.300  
 X/LB 1.000  
 PHI .1000  
 120.000 .1000  
 120.000 .1020

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 02A + S3 + T9 QMS FOD OUTSIDE

(RBOM.9)

SECTION ( 1 ) QMS FOD OUTSIDE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.0000	BETAT ( 3 ) = -4.250	X/LB	1.001
		PHI	
		110.000	.0910
		120.000	.0770
MACH ( 2 ) = 2.0000	BETAT ( 4 ) = 3.930	X/LB	1.001
		PHI	
		110.000	.0650
		120.000	.0520
MACH ( 2 ) = 2.0000	BETAT ( 5 ) = 8.020	X/LB	1.001
		PHI	
		110.000	.0150
		120.000	-.0650



(RBOMID) ( 24 MAY 73 )

AMES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE

PARAMETRIC DATA

ALPHAT = -8.1435 ORBINC = .503  
RUDDER = .0030 ELEVON = .000  
RUFLR = .0030

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 30.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.200	X/LB	1.001
		PHI	
		110.000	.1140
		120.000	.1110
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.210	X/LB	1.001
		PHI	
		110.000	.0690
		120.000	.0640
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.220	X/LB	1.001
		PHI	
		110.000	.0360
		120.000	.0290
MACH ( 1 ) = 1.555	BETAT ( 4 ) = 3.650	X/LB	1.001
		PHI	
		110.000	.0370
		120.000	-.0620
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 5.710	X/LB	1.001
		PHI	
		110.000	.0210
		120.000	-.0410
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 7.770	X/LB	1.001
		PHI	
		110.000	.0290
		120.000	-.0620
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.390	X/LB	1.001
		PHI	
		110.000	.1600
		120.000	.1550
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.330	X/LB	1.001
		PHI	
		110.000	.1210
		120.000	.1130

(RBOH1D)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 02A + S3 + T9 OMS PCD OUTSIDE

SECTION ( 1 ) OMS PCD OUTSIDE  
DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280  
X/LB 1.001  
PHI .1010  
110.000 .0910  
120.000

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170  
X/LB 1.001  
PHI .0740  
110.000 .0610  
120.000

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.940  
X/LB 1.001  
PHI .0700  
110.000 .0620  
120.000

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980  
X/LB 1.001  
PHI .0820  
110.000 -.0230  
120.000

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.050  
X/LB 1.001  
PHI .0980  
110.000 -.0610  
120.000

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 OEA + S3 + T9 OWS ROD OUTSIDE

(RBOM11) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ. FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 PRF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0310 SCALE

## PARAMETRIC DATA

ALPHAT = -8.0000 ORBINC = .5000  
 RUDDER = -15.0000 ELEVON = .0000  
 RUOFLR = .0000

## SECTION ( 1 ) OWS ROD OUTSIDE

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.420	X/LB	PHI
		1.001	
		110.000	.0840
		120.000	.0720
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.360	X/LB	PHI
		1.001	
		110.000	.0560
		120.000	.0490
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.310	X/LB	PHI
		1.001	
		110.000	.0300
		120.000	.0190
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.180	X/LB	PHI
		1.001	
		110.000	.0190
		120.000	.0020
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.940	X/LB	PHI
		1.001	
		110.000	.0040
		120.000	-.0060
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.000	X/LB	PHI
		1.001	
		110.000	.0140
		120.000	.0000
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.060	X/LB	PHI
		1.001	
		110.000	-.0200
		120.000	-.0770
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.390	X/LB	PHI
		1.001	
		110.000	.1400
		120.000	.1290

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(RBOH11)

ANES 97-707 1A9 OSA + S3 + T9 OMS POD OUTSIDE

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.340	X/LB	1.001
		PHI	
		110.000	.1110
		120.000	.0690
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.290	X/LB	1.001
		PHI	
		110.000	.0940
		120.000	.0790
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.180	X/LB	1.001
		PHI	
		110.000	.0750
		120.000	.0620
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	X/LB	1.001
		PHI	
		110.000	.0560
		120.000	.0400
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	X/LB	1.001
		PHI	
		110.000	.0470
		120.000	.0340
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.140	X/LB	1.001
		PHI	
		110.000	.0490
		120.000	-.0370

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE

(RBOH12) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES  
LREF = 39.6490 INCHES YMRP = .0000 INCHES  
BREF = 39.6490 INCHES ZMRP = .0000 INCHES  
SCALE = .0000 SCALE

PARAMETRIC DATA

ALPHAT = -4.0000 ORBINC = .5500  
RUDDER = -15.0000 ELEVON = .0000  
RUOFLR = .0000

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.350	X/LB	1.001
		PHI	
		110.000	.0650
		120.000	.0500
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.310	X/LB	1.001
		PHI	
		110.000	.0320
		120.000	.0140
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.260	X/LB	1.001
		PHI	
		110.000	.0080
		120.000	-.0090
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.170	X/LB	1.001
		PHI	
		110.000	.0090
		120.000	-.0170
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.930	X/LB	1.001
		PHI	
		110.000	-.0010
		120.000	-.0080
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	X/LB	1.001
		PHI	
		110.000	.0190
		120.000	-.0430
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.020	X/LB	1.001
		PHI	
		110.000	-.0280
		120.000	-.1070
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.320	X/LB	1.001
		PHI	
		110.000	.1250
		120.000	.1110

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 0MS POD OUTSIDE

(R80N12)

SECTION ( 1)MS POD OUTSIDE	DEPENDENT VARIABLE CP
MACH ( 2) = 2.000 BETAT ( 2) = -0.280	X/LB 1.001
	PHI
	110.000 .1080
	120.000 .0900
MACH ( 2) = 2.000 BETAT ( 3) = -4.240	X/LB 1.001
	PHI
	110.000 .0810
	120.000 .0680
MACH ( 2) = 2.000 BETAT ( 4) = -.170	X/LB 1.001
	PHI
	110.000 .0440
	120.000 .0280
MACH ( 2) = 2.000 BETAT ( 5) = 3.920	X/LB 1.001
	PHI
	110.000 .0330
	120.000 .0170
MACH ( 2) = 2.000 BETAT ( 6) = 5.960	X/LB 1.001
	PHI
	110.000 .0280
	120.000 -.0320
MACH ( 2) = 2.000 BETAT ( 7) = 8.010	X/LB 1.001
	PHI
	110.000 .0230
	120.000 -.0530

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
ANES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE

(RBM13) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = .0200 ORBINC = .500  
RUDDER = -15.000 ELEVON = .000  
RUDFLR = .0000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0200 INCHES  
SCALE = .0000 SCALE

SECTION ( 1 ) OMS POD OUTSIDE

DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.310	X/LB 1.001 PHI 110.000 .0830 120.000 .0240
MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.280	X/LB 1.001 PHI 110.000 .0170 120.000 .0340
MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.240	X/LB 1.001 PHI 110.000 -.0040 120.000 .0120
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.140	X/LB 1.001 PHI 110.000 .0190 120.000 -.0590
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940	X/LB 1.001 PHI 110.000 -.0310 120.000 -.0270
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.200	X/LB 1.001 PHI 110.000 -.0320 120.000 -.0690
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.030	X/LB 1.001 PHI 110.000 -.0610 120.000 -.1370
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.300	X/LB 1.001 PHI 110.000 .1250 120.000 .0450

AMES 97-707 1A9 02A + S3 + T9 OMS FOR OUTSIDE

(REOM13)

## SECTION ( 1 ) OMS FOR OUTSIDE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.260	X/LB	1.001
		PHI	
		110.000	.0940
		120.000	.0640
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.220	X/LB	1.001
		PHI	
		110.000	.0790
		120.000	.0630
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.140	X/LB	1.001
		PHI	
		110.000	.0470
		120.000	.0310
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	X/LB	1.001
		PHI	
		110.000	.0310
		120.000	-.0290
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	X/LB	1.001
		PHI	
		110.000	.0180
		120.000	.0060
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.020	X/LB	1.001
		PHI	
		110.000	.0160
		120.000	-.0600



AMES 97-707 1A9 02A + S3 + T9 OHS POD OUTSIDE

(RBOH14) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 29.5300 INCHES  
 LRFP = 39.8490 INCHES YMRP = .0000 INCHES  
 BRFP = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 4.0000 ORBINC = .500  
 RUDDER = -15.0000 ELEVON = .000  
 RUDFLR = .1000

DEPENDENT VARIABLE CP

SECTION ( 1 ) OHS POD OUTSIDE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.300	X/LB	PHI
		110.000	.0880
		120.000	-.0530
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.260	X/LB	PHI
		110.000	-.0090
		120.000	-.0520
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.220	X/LB	PHI
		110.000	-.0520
		120.000	-.0620
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.120	X/LB	PHI
		110.000	-.0790
		120.000	-.1010
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.950	X/LB	PHI
		110.000	.0170
		120.000	-.0610
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.000	X/LB	PHI
		110.000	-.0630
		120.000	-.1080
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.040	X/LB	PHI
		110.000	-.1000
		120.000	-.1620
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.250	X/LB	PHI
		110.000	.1230
		120.000	.0250

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 ONS POD OUTSIDE

(RBOH14)

SECTION ( 1 ) ONS POD OUTSIDE

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250  
X/LB 1.001  
PHI  
110.000 .1080  
120.000 .0060

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200  
X/LB 1.001  
PHI  
110.000 .0830  
120.000 -.0130

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.130  
X/LB 1.001  
PHI  
110.000 .0420  
120.000 .0230

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950  
X/LB 1.001  
PHI  
110.000 .0850  
120.000 -.0550

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.990  
X/LB 1.001  
PHI  
110.000 .0160  
120.000 -.0630

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040  
X/LB 1.001  
PHI  
110.000 .0140  
120.000 .0090

(RBM15) ( 24 MAY 73 )

DATE 21 SEP 73  
CALCULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 OSA + S3 + T9 OMS POD OUTSIDE

PARAMETRIC DATA

ALPHAT = 6.1660 ORBINC = .5100  
RUDDER = -15.0000 ELEVON = .0000  
RUDEFL = .0000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
SREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.320  
X/LB 1.001  
PHI  
110.000 -0.0070  
120.000 -0.0460

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.280  
X/LB 1.001  
PHI  
110.000 -0.0160  
120.000 -0.0920

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.230  
X/LB 1.001  
PHI  
110.000 -0.0680  
120.000 -0.0780

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120  
X/LB 1.001  
PHI  
110.000 -0.0800  
120.000 -0.1130

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.970  
X/LB 1.001  
PHI  
110.000 -0.0220  
120.000 -0.0880

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.030  
X/LB 1.001  
PHI  
110.000 -0.0610  
120.000 -0.1290

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.080  
X/LB 1.001  
PHI  
110.000 -0.1210  
120.000 -0.1550

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.280  
X/LB 1.001  
PHI  
110.000 .0600  
120.000 -0.0210

(RBOH15)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 C2A + S3 + T9 OMS POD OUTSIDE

SECTION ( 1 ) OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -4.210	X/LB	1.001
		PHI	
		110.000	.0620
		120.000	-.0310
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -.130	X/LB	1.001
		PHI	
		110.000	.0540
		120.000	-.0420
MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.970	X/LB	1.001
		PHI	
		110.000	-.0220
		120.000	-.0680
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 6.020	X/LB	1.001
		PHI	
		110.000	-.0430
		120.000	-.0680
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.070	X/LB	1.001
		PHI	
		110.000	.0160
		120.000	.0040

ABULATED PRESSURE DATA - 1A99

(RBDH16) ( 24 MAY 75 )

AMES 97-757 1A9 02A + S3 + T9 OMS POD OUTSIDE

PARAMETRIC DATA

ALPHAT = 8.1440 ORBTINC = .0000  
 RUDDER = -15.0440 ELEVON = .0000  
 RUDFLR = .1440

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5350 INCHES  
 LREF = 39.8490 INCHES YMRP = .0440 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.350	X/LB	PHI
		110.000	-.5550
		120.000	-.0700

MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.290	X/LB	PHI
		110.000	-.0460
		120.000	-.0700

MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	X/LB	PHI
		110.000	-.0670
		120.000	-.0940

MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.110	X/LB	PHI
		110.000	-.0980
		120.000	-.0960

MACH ( 1 ) = 1.555	BETAT ( 5 ) = 4.100	X/LB	PHI
		110.000	-.0330
		120.000	-.0780

MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.160	X/LB	PHI
		110.000	-.1030
		120.000	-.1250

MACH ( 1 ) = 1.555	BETAT ( 7 ) = 0.120	X/LB	PHI
		110.000	-.0940
		120.000	-.1530

MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.340	X/LB	PHI
		110.000	.0000
		120.000	.0000

(RBM16)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 ANES 97-787 1A9 CBA + 33 + 79 CNG. POD OUTSIDE

DEPENDENT VARIABLE CP

SECTION ( 1 ) CNG POD OUTSIDE

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	X/LB	1.001
		PHI	
		110.000	-.0020
		120.000	-.0360
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.228	X/LB	1.001
		PHI	
		110.000	-.0060
		120.000	-.0490
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.120	X/LB	1.001
		PHI	
		110.000	.0540
		120.000	-.0540
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.980	X/LB	1.001
		PHI	
		110.000	.0260
		120.000	-.0700
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.050	X/LB	1.001
		PHI	
		110.000	.0260
		120.000	-.0710
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.110	X/LB	1.001
		PHI	
		110.000	.0160
		120.000	.0130

010

DATE 21 SEP 72

ADJUSTED PRESSURE DATA - 1498

(RBN17) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .500  
 RUDDER = -10.000 ELEVON = .000  
 RUOFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 20.5300 INCHES  
 LREF = 39.8490 INCHES YREF = .0000 INCHES  
 BREF = 39.8490 INCHES ZREF = .0000 INCHES  
 SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS ROD OUTSIDE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.410  
 X/LB 1.001  
 PHI 110.000 .0890  
 120.000 .0770

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.360  
 X/LB 1.001  
 PHI 110.000 .0550  
 120.000 .0450

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.300  
 X/LB 1.001  
 PHI 110.000 .0470  
 120.000 .0360

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.180  
 X/LB 1.001  
 PHI 110.000 .0430  
 120.000 .0270

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.930  
 X/LB 1.001  
 PHI 110.000 .0110  
 120.000 .0010

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 5.990  
 X/LB 1.001  
 PHI 110.000 .0120  
 120.000 .0010

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.050  
 X/LB 1.001  
 PHI 110.000 .0250  
 120.000 -.0630

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.380  
 X/LB 1.001  
 PHI 110.000 .1620  
 120.000 .1530

(RBOH17)

TABULATED PRESSURE DATA - 1A88

DATE 21 SEP 73

AMES 97-707 1A8 OSA + S3 + TS OMS POD OUTSIDE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330		X/LB	1.001
		PHI	
		110.000	.1270
		120.000	.1170
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.260		X/LB	1.001
		PHI	
		110.000	.1080
		120.000	.0980
MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170		X/LB	1.001
		PHI	
		110.000	.0980
		120.000	.0880
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930		X/LB	1.001
		PHI	
		110.000	.0880
		120.000	.0710
MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980		X/LB	1.001
		PHI	
		110.000	.0830
		120.000	.0040
MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040		X/LB	1.001
		PHI	
		110.000	.0940
		120.000	-.0320



DATE 21 SEP 73

RADIATED PRESSURE DATA - 1A98

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AMES 97-717 1A9 02A • 53 • 79 OMS POD OUTSIDE

(RBMAP) ( 24 MAY 73

## REFERENCE DATA

SREF = 2.4210 SQ.FT. YMRP = 28.5370 INCHES  
 LREF = 59.8490 INCHES YMRP = 1.1470 INCHES  
 BREF = 59.8490 INCHES ZMRP = 1.4320 INCHES  
 SCALE = 1.0370 SCALE

## PARAMETRIC DATA

ALPMAT = -4.1400 ORBINC = 1.515  
 RUDDER = -10.1400 ELEVON = 1.515  
 RUDEFL = .0400

## SECTION ( 1 ) OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.340	X/LB	1.001
		PHI	
		110.000	.0710
		120.000	.0490
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -8.300	X/LB	1.001
		PHI	
		110.000	.0490
		120.000	.0280
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.250	X/LB	1.001
		PHI	
		110.000	.0320
		120.000	.0130
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -1.160	X/LB	1.001
		PHI	
		110.000	.0090
		120.000	-.0120
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.930	X/LB	1.001
		PHI	
		110.000	-.0090
		120.000	-.0190
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	X/LB	1.001
		PHI	
		110.000	-.0090
		120.000	-.0160
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.020	X/LB	1.001
		PHI	
		110.000	.0160
		120.000	-.1120
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.320	X/LB	1.001
		PHI	
		110.000	.1510
		120.000	.1420

(RECORD 8)

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1488  
AVES 97-707 1AS OSA + 83 + TS OMS POD OUTSIDE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 2 ) = 2.000    BETAT ( 2 ) = -6.270

X/LB    1.001  
PHI  
110.000    .1210  
120.000    .1100

MACH ( 2 ) = 2.000    BETAT ( 3 ) = -4.230

X/LB    1.001  
PHI  
110.000    .1070  
120.000    .0940

MACH ( 2 ) = 2.000    BETAT ( 4 ) = -.160

X/LB    1.001  
PHI  
110.000    .0740  
120.000    .0620

MACH ( 2 ) = 2.000    BETAT ( 5 ) = 3.980

X/LB    1.001  
PHI  
110.000    .0720  
120.000    -.0140

MACH ( 2 ) = 2.000    BETAT ( 6 ) = 5.980

X/LB    1.001  
PHI  
110.000    .0670  
120.000    -.0340

MACH ( 2 ) = 2.000    BETAT ( 7 ) = 8.000

X/LB    1.001  
PHI  
110.000    .0660  
120.000    -.0340

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1498

PAGE 019

AMES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE

(RBD091) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .000  
RUDDER = -10.000 ELEVON = .000  
RUDFLR = .000

SECTION ( 1 ) OMS POD OUTSIDE		DEPENDENT VARIABLE CP	
MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.320	X/LB	1.001
		PHI	
		110.000	.0840
		120.000	.0820
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.270	X/LB	1.001
		PHI	
		110.000	.0570
		120.000	.0370
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	X/LB	1.001
		PHI	
		110.000	.0490
		120.000	.0290
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.140	X/LB	1.001
		PHI	
		110.000	.0170
		120.000	-.0270
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.990	X/LB	1.001
		PHI	
		110.000	.0210
		120.000	.0020
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.990	X/LB	1.001
		PHI	
		110.000	.0070
		120.000	-.0520
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.040	X/LB	1.001
		PHI	
		110.000	.0440
		120.000	-.0970
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.320	X/LB	1.001
		PHI	
		110.000	.0970
		120.000	.0340

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AVES 97-707 1A9 02A + S3 + T9 OMS POI OUTSIDE

(RECON19)

## SECTION ( 1 ) OMS POI OUTSIDE

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.260	X/LB	1.001
		PHI	
		110.000	.1260
		120.000	.0190
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.220	X/LB	1.001
		PHI	
		110.000	.0490
		120.000	.0060
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.140	X/LB	1.001
		PHI	
		110.000	.0680
		120.000	-.0070
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.930	X/LB	1.001
		PHI	
		110.000	.0620
		120.000	-.0390
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.980	X/LB	1.001
		PHI	
		110.000	.0680
		120.000	-.0320
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 6.020	X/LB	1.001
		PHI	
		110.000	.0350
		120.000	-.0660

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 OEA + S3 + T9 OMS POD OUTSIDE

(RBOXED) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .000  
 RUDDER = -10.000 ELEVON = .000  
 RUDDLR = .000

REFERENCE DATA

SREF = 2.4210 SA.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0350 SCALE

SECTION ( 1 ) OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.300	X/LB	PHI	1.001
		110.000	.0950	
		120.000	-.0310	
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.270	X/LB	PHI	1.001
		110.000	.0260	
		120.000	-.0350	
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.220	X/LB	PHI	1.001
		110.000	.0660	
		120.000	-.0510	
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.130	X/LB	PHI	1.001
		110.000	.0040	
		120.000	-.0740	
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.960	X/LB	PHI	1.001
		110.000	.0570	
		120.000	-.0350	
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.010	X/LB	PHI	1.001
		110.000	-.0240	
		120.000	-.0610	
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 0.000	X/LB	PHI	1.001
		110.000	-.0130	
		120.000	-.1430	
MACH ( 8 ) = 2.140	BETAT ( 1 ) = -0.260	X/LB	PHI	1.001
		110.000	.1140	
		120.000	.0130	

DATE 21 SEP 79

TABULATED PRESSURE DATA - 1A9B

(RBOHED)

AMES 97-787 1A9 CEA + S3 + T9 OMS PCB OUTSIDE

SECTION ( 1 ) OMS PCB OUTSIDE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.240	X/LB	1.001
		PHI	
		110.000	.1240
		120.000	-.0100
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.200	X/LB	1.001
		PHI	
		110.000	.1120
		120.000	-.0190
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.130	X/LB	1.001
		PHI	
		110.000	.0220
		120.000	.0280
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.950	X/LB	1.001
		PHI	
		110.000	.0150
		120.000	-.0590
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.990	X/LB	1.001
		PHI	
		110.000	.0290
		120.000	-.0480
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.040	X/LB	1.001
		PHI	
		110.000	.0780
		120.000	-.0280

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A9B  
AWES 97-707 1A9 OEA + S3 + T9 OMS POD OUTSIDE

(RBOM21) ( 24 MAY 75 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 25.5300 INCHES  
LREF = 39.8490 INCHES YMRP = .0000 INCHES  
BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .000  
RUDDER = -10.000 ELEVON = .000  
RUDFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.330	X/LB	PHI
		110.000	-.0080
		120.000	-.0680
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.290	X/LB	PHI
		110.000	.0150
		120.000	-.0810
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.230	X/LB	PHI
		110.000	-.0490
		120.000	-.0830
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.120	X/LB	PHI
		110.000	.0080
		120.000	-.1010
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.980	X/LB	PHI
		110.000	.0140
		120.000	-.0760
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.040	X/LB	PHI
		110.000	-.0440
		120.000	-.1140
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.110	X/LB	PHI
		110.000	.0140
		120.000	-.1360
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.310	X/LB	PHI
		110.000	.0630
		120.000	-.0250

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A99

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ANES 97-707 1A9 02A \* S3 + T9 OMS POD OUTSIDE

(R80M21)

## SECTION ( 1 ) OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.260	X/LB	1.001
		PHI	
		110.000	.0630
		120.000	-.0270
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.210	X/LB	1.001
		PHI	
		110.000	.0590
		120.000	-.0320
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.120	X/LB	1.001
		PHI	
		110.000	.0090
		120.000	-.0390
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.978	X/LB	1.001
		PHI	
		110.000	.0000
		120.000	-.0630
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.020	X/LB	1.001
		PHI	
		110.000	-.0010
		120.000	-.0640
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 6.070	X/LB	1.001
		PHI	
		110.000	.0180
		120.000	-.0280



DATE 21 SEP 72 ABSOLUTE PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE (R0022) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XREF = 28.5300 INCHES  
LREF = 39.8490 INCHES YREF = .0000 INCHES  
BREF = 39.8490 INCHES ZREF = .0000 INCHES  
SCALE = .0000 SCALE

PARAMETRIC DATA

ALPHAT = 8.0000 ORBINC = .0000  
RUDDER = -10.0000 ELEVON = .0000  
RUDFLR = .0000

SECTION ( 1 ) OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.360	X/LB : 00
		PHI
		110.000 .0470
		120.000 -.0820
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.310	X/LB 1.001
		PHI
		110.000 .0340
		120.000 -.0660
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.230	X/LB 1.001
		PHI
		110.000 -.0680
		120.000 -.1140
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.110	X/LB 1.001
		PHI
		110.000 .0060
		120.000 -.1090
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.940	X/LB 1.001
		PHI
		110.000 .0410
		120.000 -.0680
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.060	X/LB 1.001
		PHI
		110.000 .0430
		120.000 -.1320
MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.120	X/LB 1.001
		PHI
		110.000 -.0460
		120.000 -.1530
MACH ( 2 ) = 2.184	BETAT ( 1 ) = -8.330	X/LB 1.001
		PHI
		110.000 .0680
		120.000 -.0210

DATE 21 SEP 73      TABULATED PRESSURE DATA - 1A90  
 ANES 97-707 1A9 OSA + S3 + T9 OMS POD OUTSIDE

(R00022)

SECTION ( 1 ) OMS POD OUTSIDE	DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000    BETAT ( 2 ) = -6.280	X/LB    1.001	
	PHI	
	110.000    .0630	
	120.000    -.0400	
MACH ( 2 ) = 2.000    BETAT ( 3 ) = -4.220	X/LB    1.001	
	PHI	
	110.000    .0250	
	120.000    -.0490	
MACH ( 2 ) = 2.000    BETAT ( 4 ) = -.110	X/LB    1.001	
	PHI	
	110.000    .0210	
	120.000    -.0500	
MACH ( 2 ) = 2.000    BETAT ( 5 ) = 4.000	X/LB    1.001	
	PHI	
	110.000    -.0120	
	120.000    -.0700	
MACH ( 2 ) = 2.000    BETAT ( 6 ) = 6.090	X/LB    1.001	
	PHI	
	110.000    .0420	
	120.000    -.0480	
MACH ( 2 ) = 2.000    BETAT ( 7 ) = 8.110	X/LB    1.001	
	PHI	
	110.000    -.0030	
	120.000    -.0360	

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

ANES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE

(RBM23) 1 24 MAR 73

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUDFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 37.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

SECTION ( 1 ) OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.400	X/LB	1.001
		PHI	.1120
			.1000
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.380	X/LB	1.001
		PHI	.0830
			.0730
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.290	X/LB	1.001
		PHI	.0610
			.0510
MACH ( 1 ) = 1.555	BETAT ( 4 ) = -3.170	X/LB	1.001
		PHI	.0340
			.0210
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.940	X/LB	1.001
		PHI	.0090
			-.0610
MACH ( 1 ) = 1.555	BETAT ( 6 ) = 8.060	X/LB	1.001
		PHI	.0290
			-.0920
MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.380	X/LB	1.001
		PHI	.1630
			.1520
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.390	X/LB	1.001
		PHI	.1300
			.1210

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE

(RBO423)

SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280  
 X/LB 1.001  
 PHI 110.000 .1170  
 120.000 .1050

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170  
 X/LB 1.001  
 PHI 110.000 .0970  
 120.000 .0880

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.930  
 X/LB 1.001  
 PHI 110.000 .0810  
 120.000 .0650

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980  
 X/LB 1.001  
 PHI 110.000 .0710  
 120.000 -.0100

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040  
 X/LB 1.001  
 PHI 110.000 .0250  
 120.000 -.0480

AMES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE

(R80M24) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 54. FT.    XREF = 28.5310 INCHES  
 LREF = 39.8490 INCHES    YREF = .0000 INCHES  
 BREF = 39.8490 INCHES    ZREF = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = -4.000    ORBINC = .000  
 RUDDER = 15.000    ELEVON = .000  
 RUDFLR = .000

## SECTION ( 1 ) OMS POD OUTSIDE    DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.330	X/LB	PHI
		110.000	.0990
		120.000	.0890

MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.290	X/LB	PHI
		110.000	.0690
		120.000	.0570

MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	X/LB	PHI
		110.000	.0480
		120.000	.0350

MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.150	X/LB	PHI
		110.000	.0160
		120.000	.0030

MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.940	X/LB	PHI
		110.000	-.0040
		120.000	-.0140

MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.980	X/LB	PHI
		110.000	.0010
		120.000	-.0080

MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.030	X/LB	PHI
		110.000	.0240
		120.000	-.1160

MACH ( 2 ) = 2.100	BETAT ( 1 ) = -8.310	X/LB	PHI
		110.000	.1490
		120.000	.1390

(R80M2A)

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98  
 ANES 97-707 IAS OCA + S.S. : TS OMS POD OUTSIDE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.270	X/LB PHI	1.001 .1200 110.000 120.000 .1090
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.250	X/LB PHI	1.001 .1020 110.000 120.000 .0910
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.160	X/LB PHI	1.001 .0699 110.000 120.000 .0690
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.920	X/LB PHI	1.001 .0630 110.000 120.000 .0510
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.960	X/LB PHI	1.001 .0560 110.000 120.000 .0400
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.010	X/LB PHI	1.001 .0380 110.000 120.000 -.0530

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AVES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE

(REOMES) ( 24 MAY 73 )

# REFERENCE DATA

SREF = 2.4210 98.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

# PARAMETRIC DATA

ALPHAT = .000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUOFLR = .000

# DEPENDENT VARIABLE CP

## SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -0.320	X/LB	PHI
		1.001	
		110.000	.1070
		120.000	.0680

MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.270	X/LB	PHI
		1.001	
		110.000	.0760
		120.000	.0590

MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.240	X/LB	PHI
		1.001	
		110.000	.0600
		120.000	-.0100

MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.130	X/LB	PHI
		1.001	
		110.000	.0140
		120.000	-.0590

MACH ( 1 ) = 1.555	BETAT ( 5 ) = 3.990	X/LB	PHI
		1.001	
		110.000	.0190
		120.000	.0100

MACH ( 1 ) = 1.555	BETAT ( 6 ) = 5.990	X/LB	PHI
		1.001	
		110.000	.0210
		120.000	-.0830

MACH ( 1 ) = 1.995	BETAT ( 7 ) = 8.040	X/LB	PHI
		1.001	
		110.000	.0640
		120.000	-.1340

MACH ( 2 ) = 2.000	BETAT ( 1 ) = -8.290	X/LB	PHI
		1.001	
		110.000	.1390
		120.000	.0480

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A88

(R80425)

AMES 97-707 1AS CEA + 53 + T9 CMS POD OUTSIDE

DEPENDENT VARIABLE CP

SECTION ( 1 ) CMS POD OUTSIDE

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -0.250

X/LB	1.001
PHI	
110.000	.1160
120.000	.0210

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -0.210

X/LB	1.001
PHI	
110.000	.1010
120.000	.0120

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.140

X/LB	1.001
PHI	
110.000	.0710
120.000	-.0160

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.950

X/LB	1.001
PHI	
110.000	.0620
120.000	-.0420

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 6.080

X/LB	1.001
PHI	
110.000	.0510
120.000	-.0750



DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AVES 97-757 1A9 OSA + S3 + T9 OMS POD OUTSIDE

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -6.300

X/LB 1.001  
 PHI 110.000 .0843  
 120.000 -.0510

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.280

X/LB 1.001  
 PHI 110.000 .0820  
 120.000 -.0660

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220

X/LB 1.001  
 PHI 110.000 .0490  
 120.000 -.0440

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.120

X/LB 1.001  
 PHI 110.000 .0410  
 120.000 -.0860

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.960

X/LB 1.001  
 PHI 110.000 .0410  
 120.000 -.0550

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.010

X/LB 1.001  
 PHI 110.000 .0520  
 120.000 -.1110

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 6.090

X/LB 1.001  
 PHI 110.000 -.0050  
 120.000 -.1560

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.280

X/LB 1.001  
 PHI 110.000 .0920  
 120.000 .0030

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUDFLR = .000

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AVES 97-707 1A9 02A + 33 + T9 CMS POD OUTSIDE

(R80426)

## SECTION ( 1 ) CMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.230	X/LB	1.001
		PHI	
		110.000	.1240
		120.000	-.0810
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.200	X/LB	1.001
		PHI	
		110.000	.1058
		120.000	-.0200
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.120	X/LB	1.001
		PHI	
		110.000	.0690
		120.000	-.0160
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.950	X/LB	1.001
		PHI	
		110.000	.0290
		120.000	-.063
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 5.990	X/LB	1.001
		PHI	
		110.000	.0070
		120.000	-.0650
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 6.000	X/LB	1.001
		PHI	
		110.000	.0900
		120.000	-.0350

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 OEA + S3 + T9 OMS POD OUTSIDE

(RBOH27) ( 24 MAY 73 )

PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUFLR = .000

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 26.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0000 SCALE

DEPENDENT VARIABLE CP

SECTION ( 1 ) OMS POD OUTSIDE

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.330	X/LB	PHI
		110.000	.0020
		120.000	-.0940
		X/LB	1.001
		PHI	.0910
		120.000	-.1010
		X/LB	1.001
		PHI	.0910
		120.000	-.1010
		X/LB	1.001
		PHI	-.0090
		120.000	-.0820
		X/LB	1.001
		PHI	-.0590
		120.000	-.0940
		X/LB	1.001
		PHI	.0450
		120.000	-.0900
		X/LB	1.001
		PHI	-.0020
		120.000	-.1370
		X/LB	1.001
		PHI	.0000
		120.000	-.1440
		X/LB	1.001
		PHI	.0680
		120.000	-.0220
		X/LB	1.001
		PHI	.0680
		120.000	-.0220

DATE 21 SEP 79 TABULATED PRESSURE DATA - 1A98

(R80M27)

ANES 97-707 1A9 02A + S3 + T9 QMS POD OUTSIDE

SECTION ( 1 ) QMS POD OUTSIDE		DEPENDENT VARIABLE CP	
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	X/LB	1.001
		PHI	
		110.000	.0100
MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.250	120.000	-.0210
		X/LB	1.001
		PHI	
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.800	110.000	.0680
		120.000	-.0150
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.120	X/LB	1.001
		PHI	
		110.000	.0120
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.970	120.000	-.0430
		X/LB	1.001
		PHI	
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.050	110.000	.0280
		120.000	-.0700
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.070	X/LB	1.001
		PHI	
		110.000	.0160
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.070	120.000	-.0760
		X/LB	1.001
		PHI	
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 8.070	110.000	.0620
		120.000	.0230

AMES 97-707 1A9 02A + S3 + T9 OMS POD OUTSIDE

(RBOX26) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .000  
 RUDDER = 15.000 ELEVON = .000  
 RUDDLR = .000

## SECTION ( 1 ) OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -0.350	X/LB	PHI
		1.001	
		110.000	.0280
		120.000	-.0980

MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.300	X/LB	PHI
		1.001	
		110.000	.0630
		120.000	-.0780

MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.230	X/LB	PHI
		1.001	
		110.000	.0140
		120.000	-.1330

MACH ( 1 ) = 1.555	BETAT ( 4 ) = -.110	X/LB	PHI
		1.001	
		110.000	-.0330
		120.000	-.1130

MACH ( 1 ) = 1.555	BETAT ( 5 ) = 4.000	X/LB	PHI
		1.001	
		110.000	.0360
		120.000	-.0960

MACH ( 1 ) = 1.555	BETAT ( 6 ) = 6.080	X/LB	PHI
		1.001	
		110.000	.0370
		120.000	-.1580

MACH ( 1 ) = 1.555	BETAT ( 7 ) = 8.130	X/LB	PHI
		1.001	
		110.000	-.0900
		120.000	-.1600

MACH ( 2 ) = 2.000	BETAT ( 1 ) = -0.320	X/LB	PHI
		1.001	
		110.000	.0380
		120.000	-.0290

DATE 21 SEP 75

TABULATED PRESSURE DATA - 1A9B

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AVES 97-707 1A9 OSA + S3 + T9 CRS POD OUTSIDE

(R00028)

## SECTION ( 1 ) CRS POD OUTSIDE DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 2 ) = -6.260	X/LB	1.001
		PHI	
		110.000	.0680
		120.000	-.0180
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.210	X/LB	1.001
		PHI	
		110.000	.0260
		120.000	-.0310
MACH ( 2 ) = 2.000	BETAT ( 4 ) = -.110	X/LB	1.001
		PHI	
		110.000	.0350
		120.000	-.0270
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 3.990	X/LB	1.001
		PHI	
		110.000	.0080
		120.000	-.0530
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 6.090	X/LB	1.001
		PHI	
		110.000	.0140
		120.000	-.0630
MACH ( 2 ) = 2.000	BETAT ( 7 ) = 9.110	X/LB	1.001
		PHI	
		110.000	-.0140
		120.000	-.0530

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

ANES 97-707 1A9 02A + S3 + T9 LOWER WING (RBD001) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
LREF = 33.8490 INCHES YMRP = 10.0000 INCHES  
BREF = 33.8490 INCHES ZMRP = 10.0000 INCHES  
SCALE = 0.300 SCALE

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 ALPHAT( 1 ) = -0.400

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.000	-.0480	.0040	.1250	.4840	.4550	.4240	.3950
.050				-.3510	-.4010	-.4220	-.4260
.081		-.0710	-.1330				
.086							
.094	-.0220			-.1850	-.3680	-.3780	-.3860
.150			-.1090				
.177		-.0610					
.229		-.0490					
.246	-.0750			-.0550	-.1780	-.3200	-.3590
.250				.0420	-.1060		-.3250
.362			-.0010				
.400							
.402							
.497	.0900			-.0630	.1420		
.590							
.565							
.620							
.650							
.710	-.1210						
.725				-.1710	-.1560		
.750							
.760							
.775							
.808							
.834	-.1720			-.2080	-.2760	-.2950	
.850							
.857							
.865	-.2450						
.900	-.3170			-.3230			
.915							
.950				-.3550	-.3360	-.3150	
.953							
.965	-.3460						
.975	.299	.364	.427	.534	.673	.780	.887
X/CW							
.100	-.0030	.0000	.1630	.5910	.4820	.4610	.4370
.150				-.3060	-.3440	-.3680	-.3910
.181			-.0940				
.186		-.0680					
.194							

MACH ( 1 ) = 1.555 ALPHAT( 2 ) = -0.350

PARAMETRIC DATA

BETAT = .000 ORBINC = .500  
RUDDER = .000 ELEVON = .000  
RUOFLR = .000





AMES 97-707 1A9 02A + S3 + T9 LOWER WING (R80L01)

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 ALPHAT( 3 ) = -4.250

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.550							
.565							
.600							
.650							
.700							
.725							
.750							
.760							
.775							
.808							
.834							
.850							
.857							
.865							
.900							
.905							
.950							
.953							
.965							
.550							
.565							
.600							
.650							
.700							
.725							
.750							
.760							
.775							
.808							
.834							
.850							
.857							
.865							
.900							
.905							
.950							
.953							
.965							

MACH ( 1 ) = 1.555 ALPHAT( 4 ) = -2.190

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.000							
.050							
.081							
.086							
.094							
.150							
.177							
.229							
.246							
.290							
.362							
.400							
.402							
.497							
.550							
.565							
.600							
.650							
.700							
.725							
.750							
.760							
.775							



AMES 97-707 IAS 02A + S3 + T9 LOWER WING

(RBOLD1)

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 ALPHAT( 5 ) = -.120

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.965	-.3320						

MACH ( 1 ) = 1.555 ALPHAT( 6 ) = 1.950

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.000	-.1730	-.1160	.2490	.6800	.6350	.6980	.6130
.050				.1420	.1280	.1080	.1020
.081			.1430				
.086		-.0100					
.094	.0010						
.150				.1740	.2150	.1650	.1700
.177			.2530				
.229	.0020						
.246		.0710					
.250				.0980	.1200	.1720	.2490
.362	-.0300			.1820	.3490		.2790
.400			.1350				
.412							
.497	.2020		.1360				
.550				.1730	.1820		
.565							.1150
.600						.0770	
.700	.0560			-.0150			
.725				-.0280			
.750							
.760				-.0680			
.775				-.0780	-.0950		
.818							
.834	-.0400			-.1690	-.1440	-.1330	
.850							
.857			.0000				
.865	-.1760						
.900	-.2440						
.905				-.2130			
.950							
.953				-.2250	-.2180	-.2110	
.965	-.3450			-.2840			

MACH ( 1 ) = 1.555 ALPHAT( 7 ) = 4.010

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.020	-.1920	-.1700	.2360	.6930	.6420	.6370	.6020
.050				.2190	.2080	.2250	.3090
.081			.2400				
.086		.0170					
.094	.0220						

**TABULATED PRESSURE DATA - 1A98**

AMES 97-707 1A9 02A + S3 + T9 LOWER WING

(RBO1.D1)

**DEPENDENT VARIABLE CP**

**SECTION (1) LOWER WING**

**WACH ( 1 ) = 1.555    ALPHAT( 7 ) = 4.010**

Y/BW	.299	.364	.427	.534	.673	.780	.867
X/CW							
.150			.1800				
.177	.0298			.1710	.2300	.2870	.4579
.229							
.246		.1300		.2660	.3020	.4470	.3860
.250							
.362	.0420			.3230	.3510		.2820
.400							
.402			.2270				
.437	.2150			.1420	.1760		
.553			.0740				.1180
.565						.0850	
.600							
.650	.0630				.0050		
.700							
.725							
.750							
.760							
.775							
.806							
.834							
.850							
.857							
.865							
.900							
.905							
.940							
.953							
.965							
Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW							
.140							
.150							
.161							
.166		.0250					
.194	.0640						
.190							
.177			.2120				
.229	.0640			.2230	.4230	.4690	.4370
.246		.1560					
.250							
.362				.3260	.4360	.4120	.4030
.402	.0710						
.402				.3260	.3400		.3190
.497	.2860		.2340				

$$\text{ALPHAT}(1) = 1.999 \quad \text{ALPHAT}(0) = 6.060$$

Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW	-.2160	-.2260	.1780	.6850	.6300	.6570	.5360
.1410				.2850	.2960	.4640	.4990
.090			.2770				
.181		.0250					
.166							
.194	.1640			.2230	.4230	.4690	.4370
.150			.2120				
.177							
.229	.1640	.1560					
.246				.3260	.4360	.4120	.4030
.290							
.362	.1710						
.412				.3260	.3400		.3190
.412			.2340				
.497	.2860						



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TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 OSA + S3 + T9 LOWER WING

(RBCL01)

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 ALPHAT( 9 ) = 8.130

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.806			-.0360				
.834	-.0420			-.0680	-.0460	-.0559	
.850			.0000				
.857							
.865	-.1850			-.1300			-.0790
.900	-.2530		-.2140				
.905				-.1750	-.1500	-.1370	
.950			-.2750				
.953							
.965	-.2700						

MACH ( 2 ) = 2.000 ALPHAT( 1 ) = -8.360

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.000							
.050	.0560	.0290	.2650	.6230	.5370	.5250	.5710
.081			.0250	-.1140	-.1750	-.1890	-.1870
.086		.0610					
.094	.0250			-.0590	-.1240	-.1520	-.1740
.150			.0080				
.177							
.229	.0900						
.246		.0660		-.0640	-.1170	-.1280	-.1500
.250							
.362	.0390			.0260	.0290		-.1250
.400			.0390				
.402							
.497	-.0260			-.0120	-.0500		
.550			-.0150				-.1440
.565						-.0880	
.600							
.650							
.700	-.0470			-.0810	-.0670		
.725						-.1360	-.1470
.750			-.1060				
.760				-.1230	-.1030		
.775			-.1420				
.816							
.834	-.1300			-.1680	-.1440	-.1490	
.850			.0020				
.857							
.865	-.1650			-.1920			-.1750
.910	-.1750		-.1810				
.915				-.2050	-.1860	-.1650	
.950			-.1760				
.953							

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
ANES 97-707 1A9 CBA + S3 + T9 LOWER WING

(R00101)

DEPENDENT VARIABLE CP

SECTION ( 1 ) LOWER WING

MACH ( 2 ) = 2.000 ALPHAT ( 1 ) = -8.360

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

MACH ( 2 ) = 2.000 ALPHAT ( 2 ) = -6.310

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

MACH ( 2 ) = 2.000 ALPHAT ( 3 ) = -4.250

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887

Y/BW	X/CW	CP
.299	.364	.427
.299	.364	.673
.299	.364	.780
.299	.364	.887





**TABULATED PRESSURE DATA - 1A9B**

AMES 97-707 1A9 02A + S3 + T9 LOWER WING

(RBC0101)

SECTION (1) LOWER WING

DEPENDENT VARIABLE	CP
--------------------	----

$$\text{MACH}(2) = 2.000 \quad \text{ALPHAT}(4) = -2.210$$

Y/B/W  
X/C/W

0.534	0.673	0.700	0.667
0.0170	0.0350		
			0.0410

0160  
0410

-.0380  
-.0420  
-.0630  
-.0660

0850 - 0580

**.1230 -.0900 -.1060**

-.1000      -.1250

.1140 -.1076 -.1290

$$\text{ALPHAT}(5) = -0.160$$

1/20/1

.534	.673	.780	.887
.5810	.6180	.6490	.6820
.6610	-.0450	-.0450	-.0470

0320 0360 0450 0510

.0210	.0170	.0390	.0390
-------	-------	-------	-------

02801. 0261. 0261.

.0550 .0810 .0440

0010°  
0200°-  
0847°

-.0550    -.0150  
-.0140    -.0070

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(R00LD1)

AMES 97-707 1A9 02A + S3 + T9 LOWER WING

SECTION ( 1 ) : LOWER WING

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 ALPHAT( 5 ) = -.160

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.808			-.0670				
.834	-.0900			-.0390	-.0560	-.0760	
.850		.0000					
.857							
.865	-.1010			-.0790			-.0860
.900	-.1140						
.905		-.0830					
.950			-.1010	-.0870	-.0800		
.953			-.1270				
.965	-.1820						

MACH ( 2 ) = 2.000 ALPHAT( 6 ) = 1.890

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.000							
.050	-.0690	-.0510	.2070	.7150	.6590	.6790	.7000
.081			.1120	.0680	.0100	.0250	.0230
.086		.0110					
.094	.0360			.0770	.1070	.0990	.1080
.150			.1050				
.177							
.229	.0240	.0690					
.246				.0740	.0690	.1250	.1400
.250							
.362	.0390			.1800	.2430		.1510
.400			.1390				
.402							
.497	.0520			.0960	.1280		
.550			.0950				.1190
.565						.0900	
.600					.0850		
.650		.0100		.0240		.0300	.0200
.720							
.725			-.0010	.0010	.0230		
.750							
.760			-.0090				
.775							
.818	-.0490			-.0270	.0250	.0010	
.834			.1420				
.850							
.857				-.0700			-.0630
.865	-.0820						
.920	-.0750		-.0570				
.955				-.0820	-.0710	-.0160	
.950							
.953			-.0700				

ANES 97-707 1A9 02A + S3 + T9 LOWER WING

SECTION C (111) OF WINE

PARAMETER	UNIT	VALUE
ALPHAT( 2)		2.000
ALPHAT( 6)		1.890
Y/BW		.299
Y/CW		.364
		.427
		.534
		.673
		.780
		.887

SEARCH	( 2 )	2,000	ALPHAT( 7 )	= 3,950	Y/CM	.299	.364	.427	.534	.673	.780	.887
					Y/CM	-.0930	-.0940	.2320	.7580	.6800	.7000	.7030
					Y/CM				.1570	.1140	.1210	.1510

[illegible]

.135	.1310
.177	
.229	.0350
.246	.0900

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100																																																																																																																																									
1990	1.490	1.760	2.120	2.390	2.670	2.950	3.230	3.510	3.790	4.070	4.350	4.630	4.910	5.190	5.470	5.750	6.030	6.310	6.590	6.870	7.150	7.430	7.710	7.990	8.270	8.550	8.830	9.110	9.390	9.670	9.950	10.230	10.510	10.790	11.070	11.350	11.630	11.910	12.190	12.470	12.750	13.030	13.310	13.590	13.870	14.150	14.430	14.710	14.990	15.270	15.550	15.830	16.110	16.390	16.670	16.950	17.230	17.510	17.790	18.070	18.350	18.630	18.910	19.190	19.470	19.750	20.030	20.310	20.590	20.870	21.150	21.430	21.710	21.990	22.270	22.550	22.830	23.110	23.390	23.670	23.950	24.230	24.510	24.790	25.070	25.350	25.630	25.910	26.190	26.470	26.750	27.030	27.310	27.590	27.870	28.150	28.430	28.710	28.990	29.270	29.550	29.830	30.110	30.390	30.670	30.950	31.230	31.510	31.790	32.070	32.350	32.630	32.910	33.190	33.470	33.750	34.030	34.310	34.590	34.870	35.150	35.430	35.710	35.990	36.270	36.550	36.830	37.110	37.390	37.670	37.950	38.230	38.510	38.790	39.070	39.350	39.630	39.910	40.190	40.470	40.750	41.030	41.310	41.590	41.870	42.150	42.430	42.710	42.990	43.270	43.550	43.830	44.110	44.390	44.670	44.950	45.230	45.510	45.790	46.070	46.350	46.630	46.910	47.190	47.470	47.750	48.030	48.310	48.590	48.870	49.150	49.430	49.710	49.990	50.270	50.550	50.830	51.110	51.390	51.670	51.950	52.230	52.510	52.790	53.070	53.350	53.630	53.910	54.190	54.470	54.750	55.030	55.310	55.590	55.870	56.150	56.430	56.710	56.990	57.270	57.550	57.830	58.110	58.390	58.670	58.950	59.230	59.510	59.790	60.070	60.350	60.630	60.910	61.190	61.470	61.750	62.030	62.310	62.590	62.870	63.150	63.430	63.710	63.990	64.270	64.550	64.830	65.110	65.390	65.670	65.950	66.230	66.510	66.790	67.070	67.350	67.630	67.910	68.190	68.470	68.750	69.030	69.310	69.590	69.870	70.150	70.430	70.710

.412	.1850
.497	.0690
.550	.1890
.565	.2080
	.1030

.600	.1570
.650	.1710
.700	.1800
.0330	

.725	.0710	.1340	.0570
.750			
.760	.0280		
.775		.1490	.1070

.775			
.816		.0390	
.834	-.0160		
.850		-.0190	.0390

.657	.0000	
.865	-.0420	
.900	-.0750	-.0580
.900		-.0190

.975	-.0730	
.990		-.10620
.993		-.0540
.995		-.1170
.965	-.1660	
		-.0260

WOMAN (Z) = Z.CUE	ALPHAT (S) = 5.980	Y/BW	Y/CW
1	1	.299	.364
2	1	.427	.534
3	1	.673	.780
4	1	.807	

[illegible]

.066  
.094  
.0420  
.0000

100

AVES 97-707 1A9 02A + S3 + T9 LOWER MING

(RBOU01)

## SECTION ( 1 ) LOWER MING

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 ALPHAT( 8 ) = 5.980

Y/BN X/CN	.299	.364	.427	.534	.673	.780	.887
.150							
.177			.2110				
.229	.0420						
.246		.0990					
.250				.2220	.2660	.3150	.3390
.362	.0700			.2770	.3210		.3510
.400			.2280				
.402							
.497	.1250			.2460	.2900		
.550			.1560				
.565							.2280
.600						.2620	
.650					.1330		
.700	.0370					.2340	.2120
.725			.0740				
.750				.0630	.1360		
.760							
.775			.0990				
.808							
.834	.0240						
.850			.0000			.0460	.0870
.857							
.865	-.0240						
.900	-.0750						
.905							
.905							
.950							
.953							
.965	-.1610						

MACH ( 2 ) = 2.000 ALPHAT( 9 ) = 8.020

Y/BN X/CN	.299	.364	.427	.534	.673	.780	.887
.000							
.050							
.061							
.066							
.094							
.150							
.177							
.229	.0390		.2660				
.246		.1300					
.250							
.362	.0820			.2620	.3210	.3960	.4270
.400							
.402							
.497			.2700				

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TABULATED PRESSURE DATA - 1A98  
 AMES 97-707 1A9 O2A + S3 + T9 LOWER WING

(R00L01)

SECTION ( 3 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.0000 ALPHAMAT ( 9 ) = 8.020

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.550			.1940				
.565				.2950	.4490		
.600						.3300	.3910
.650					.1930		
.700	.0750			.1250		.1950	.2030
.725							
.750							
.760			.0360	.0370	.0640		
.775			.0450				
.808							
.834	.0200			-.0450	.0290	.0780	
.850			.0000				
.857							
.865	-.0070			-.0850			.0670
.900	-.0490						
.905			-.0680	-.0900	-.0620	-.0090	
.940			-.1040				
.953							
.965	-.1540						

AVES 97-707 1A9 CBA + 53 + T9 LOWER WING.

(RECOLDE) ( 24 MAY 73 )

## REFERENCE DATA

SRFP = 2.4210 98.FT. XGRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YGRP = .0000 INCHES  
BRFP = 39.8490 INCHES ZGRP = .0000 INCHES  
SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .500  
RUIDER = .000 ELEVON = .000  
RUDFLR = .000

## DEPENDENT VARIABLE CP

SECTION ( 1 ) LOWER WING

MACN ( 1 ) = 1.355 BETAT ( 1 ) = -7.140

	Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.000	-.0390	-.0740	.4070	.6970	.8000	.7640	.6190	
.050			.6200	.6350	.6620	.6680	.7070	
.081		.1380						
.086		.1250						
.094				.5770	.5980	.5970	.6120	
.190			.5680					
.177		.1400						
.229		.3680						
.246				.4320	.5030	.5040	.5760	
.290		.1600		.4050	.5070		.4650	
.362			.3630					
.402		.4770		.3640	.3620			
.497			.3440					
.550								.2920
.565								
.600						.2730		
.650		.3280			.1840			
.710				.1870		.1640	.1420	
.725								
.750				.0990				
.760				.0900	.0850			
.775				.0290				
.848								
.834	.0370			-.0320	.0250	.0270		
.890								.0110
.857			.0020					
.865	-.1200							
.940	-.1830			-.0970				
.945			-.1660					
.950				-.1470	-.0970	-.0610		
.953			-.2320					
.965	-.2950							
Y/BW	.299	.364	.427	.534	.673	.780	.887	
X/CW								
.000	-.1070	-.1460	.3390	.8400	.7640	.7230	.5720	
.050				.5780	.6510	.6270	.6600	
.081			.4450					
.086		.1310						
.094								
.190		.0880						

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-ABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 OCA + S3 + T9 LOWER WING (R80L02)

## DEPENDENT VARIABLE CP

SECTION ( 1 ) LOWER WING

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.100

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.150							
.177			.5360				
.229	.1180						
.246		.2660					
.250							
.362	.1680			.4130	.4510	.5560	.5450
.400				.3800	.4880		.4250
.412			.2800				
.497	.4510			.2980	.3150		
.550			.2800				
.565							.2550
.600						.2230	
.650							
.710	.2470			.1690	.1560		
.725						.1400	.1080
.750							
.760			.0880	.1630	.0740		
.775			.0270				
.808							
.834	.0170			-.0230	.0170	.0190	
.850			.0700				
.857							
.855	-.1360			-.0990			-.0070
.920	-.1940						
.915			-.1690				
.950				-.1530	-.0950	-.0750	
.953			-.2410				
.965	-.2970						
Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.020	-.1650	-.1910	.2890	.7830	.7230	.6880	.5360
.050				.5210	.6260	.6010	.6370
.081		.1190	.3760				
.086							
.094	.0610			.5020	.5480	.5210	.5540
.150							
.177			.5030				
.229	.1920						
.245		.2270					
.250				.4460	.4190	.5180	.5258
.362	.1360			.2980	.4710		.4070
.400			.2640				
.402							
.497	.4460						

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 LOWER WING

(R90102)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.550							
.565			.2510	.2680	.2900		.2320
.600						.1940	
.650					.1090		
.700	.1830			.0990		.0690	.0780
.725							
.750			.0700				
.760				.0340	.0380		
.775			-.0070				
.808							
.834	.0140			-.0610	-.0200	-.0210	
.850			.0000				
.857							
.865	-.1470			-.1060			-.0900
.900	-.2160		-.1810				
.905				-.1470	-.1260	-.0830	
.950			-.2370				
.953							
.965	-.3030						

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 1.110

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.000							
.050	-.3400	-.2880	-.0240	.5580	.5780	.5660	.4210
.081			.4440	.4320	.4790	.4880	.5170
.086		-.0120					
.094	.0450			.3430	.4140	.4120	.4420
.150			.3170				
.177	.0270						
.229	.2090			.2310	.3020	.3870	.4160
.246							
.250				.2980	.3730		.3540
.362	.0640						
.400			.1910				
.402							
.497	.1810		.1470	.1970	.2150		.1870
.550							
.565						.1430	
.600					.0650		
.700	.1280			.0390		.0620	.0330
.725							
.750							
.760			-.0280	-.0330	-.0320		
.775							



ANES 97-707 1A9 02A + S3 + T9 LOWER WING (RBOL02)

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.110

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.808			-.0910				
.834	-.1060						
.850				-.1280	-.0780	-.0560	
.857			.0000				
.865	-.2390			-.1800			-.0770
.900	-.2850						
.905			-.2540				
.950				-.2230	-.1760	-.1350	
.953			-.3070				
.965	-.1450						

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.140

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.000	-.3660	-.2870	-.0370	.4150	.4750	.4670	.3680
.050				.3720	.3980	.4060	.4570
.081			.3580				
.086		.0390					
.094	.0680						
.150				.2900	.3470	.3440	.3490
.177			.2760				
.229	.0720	.2480					
.246				.1850	.2240	.3280	.3480
.250							
.362	.2160			.1320	.2280		.2750
.400			.0660				
.402							
.497	.1160			.1340	.1590		
.550			.1450				
.565							.1440
.600						.1080	
.650	.1690			.0090	.0430		
.700						.0360	.0020
.725							
.750							
.760			-.0580				
.775				-.0580	-.0490		
.808			-.1420				
.834	-.1110						
.850			.0000				
.857				-.1400	-.0980	-.0740	
.865	-.2420						
.900	-.2230			-.1900			-.1000
.905			-.2670				
.950				-.2390	-.1800	-.1500	
.953			-.2950				



SECTION ( 1 ) LOWER WING  
 ARES 97-707 1A9 OCA + S3 + T9 LOWER WING (R80L02)

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.320

Y/BW X/CM	.299	.364	.427	.534	.673	.780	.887
.150							
.177							
.229			.3340				
.246		.2530					
.250							
.362	.1470						
.400							
.402							
.497	.1800		.4860				
.550							
.565			.4230				
.620							
.650							
.720	.3240						
.725				.2250	.3170	.4320	.4530
.750							
.780			.2150			.3120	.3000
.775							
.808			.1640			.2020	
.834	.2410						
.850							
.857			.0000			.1780	
.865	.1280						
.900	.0500				.0780		
.905							.1520
.950			.0780				
.953					.0150	.0360	
.965	-.0860		-.0140				

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.270

Y/BW X/CM	.299	.364	.427	.534	.673	.780	.887
.000							
.050	.0250	.0050	.4430	1.0220	.9080	.9140	.8350
.081				.3700	.4150	.4810	.5460
.086		.1620	.3060				
.094	.1140						
.150							
.177			.2900				
.229	.1240			.3300	.4430	.4610	.5050
.246		.2290					
.250							
.362	.1260		.2750	.3530	.4420	.4830	
.400							
.402			.2580	.4840			.5740
.497	.1270		.3920				

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TABULATED PRESSURE DATA - 1A98

(R80L02)

AMES 97-707 1A9 02A + S3 + T9 LOWER WING

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.270

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.530							
.565			.3280	.5040	.5200		
.620						.4120	.4020
.650							
.700	.2960			.1930	.2910	.2320	.2740
.725							
.750			.1990		.1900		
.760							
.775			.1460				
.808							
.834	.1750			.0320	.1150	.1610	
.850			.0220				
.857							
.865	.0990			.0900			.1410
.900	.0320		.0250			.0640	
.905				.0230	.0060		
.950			-.0150				
.953							
.965	-.0980						

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.020							
.050	-.0450	-.0820	.3650	.9240	.8480	.8550	.7810
.081			.2770	.3310	.3890	.4420	.5000
.086		.1230					
.094	.0890			.2950	.4070	.4210	.4540
.150			.2520				
.177	.0950						
.229		.1940					
.246				.2480	.3130	.3930	.4320
.250							
.362	.1080			.2540	.4130		.4130
.400			.3830				
.402							
.497	.1250			.4530	.5440		
.550			.3110				
.565							.4290
.600						.4020	
.650	.2440				.2620		
.700							
.725				.1720		.2730	.2740
.750							
.760			.1370				
.775				.1820	.1470		

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
ANES 97-707 1A9 Q2A + S3 + T9 LOWER MINE

(RBC102)

SECTION ( 1 ) LOWER MINE

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.210

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.808			.0990				
.834	.1520				.0200	.0830	.1370
.890			.0000				
.857							
.865	.0690			.0020			.1180
.900	-.0010		.0720				
.905				-.0050	-.0140	.0380	
.950			-.0460				
.953							
.965	-.1190						

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.990

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.000			.0630	.6090	.5940	.6010	.5380
.050				.2730	.3370	.3870	.4360
.081		.0070	.1940				
.086							
.094	-.0040			.2480	.3680	.3690	.4130
.150			.2070				
.177							
.229	.0290	.1120		.2740	.3030	.3650	.3980
.246							
.250				.1560	.3180		.3725
.362	.0750		.0890				
.400				.1210	.2000		
.412	.1410		.0700			.2420	
.497							
.550							
.565							
.610							
.650						.1920	
.700	-.0170			.0900	.0880		
.725						.1120	.1200
.750			.0010				
.780				-.0020	.0240		
.725			-.0200				
.818							
.834	.0090			-.0750	.0310	.0440	
.850			.0000				
.857							.0320
.865	-.0690			-.1000			
.900	-.1190		-.0910				
.905				-.1060	-.0610	-.0430	
.950			-.1350				
.953							

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TABULATED PRESSURE DATA - 1A98

ANES 97-707 1A9 02A + S3 + T9 LOWER WING

(RBCLOP)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.990	Y/BW X/CW	.299 .965	.364 -.1730	.427 .	.534 .	.673 .	.780 .	.887 .
MACH ( 2 ) = 2.000	BETAT ( 5 ) = 6.060	Y/BW X/CW	.299 .	.364 .	.427 .	.534 .	.673 .	.780 .	.887 .
		.000	-.2050	-.2310	-.0420	.4720	.5350	.5580	.4680
		.080				.2610	.3620	.3760	.3990
		.081		.1490					
		.086	-.0220						
		.094	-.0200			.2660	.3460	.3120	.3400
		.150		.2180					
		.177	.0060						
		.246	.0620			.1510	.1920	.2710	.3160
		.250							.3020
		.362	.0150			.1150	.2720		
		.400		.0480					
		.402				.0660	.1350		
		.497	.1070		.0280				.2570
		.550							
		.565					.0410		.1870
		.600	-.0320			.0110		.0730	.1590
		.700			.0050	-.0110	-.0240		
		.725			-.0060				
		.750				-.0530	-.0560	-.0210	
		.760	-.0080		.0000				
		.775				-.0610			.0570
		.808			-.1110	-.0990	-.0980	-.0370	
		.834			-.1560				
		.850	-.1420						
		.857							
		.865	-.1040						
		.900	-.1440						
		.905							
		.950							
		.953							
		.965							
MACH ( 2 ) = 2.000	BETAT ( 6 ) = 8.120	Y/BW X/CW	.299 .	.364 .	.427 .	.534 .	.673 .	.780 .	.887 .
		.000	-.2220	-.2520	-.1210	.3490	.6020	.6190	.5340
		.050				.2270	.4050	.4080	.4370
		.081		.1210					
		.086	-.0550						
		.094	-.0300						

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TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 02A + S3 + T9 LOWER WING

(RB0102)

## SECTION 1 LOWER WING

## DEPENDENT VARIABLE CP

MACH (2) = 2.000 BETAT (6) = 8.125

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.150							
.177			.1810	.2080	.3710	.3340	.3740
.229	-.0270	.0150					
.246				.1830	.2080	.2930	.3530
.250				.1390	.2910		.3640
.362	-.0400						
.400			.0310				
.402							
.497	.0830			.1650	.1930		
.550			.1080				
.565							.2370
.600						.1720	
.650				.0900	.0970		
.700	.0260					.0780	.1000
.725							
.750			.0080				
.760					.0320		
.775			-.0300				
.808							
.834	-.0500			-.0440		.01	
.850							
.857			.0000				
.865	-.1230						
.900	-.1520			-.0860			.0070
.915			-.1350				
.950				-.1130	-.0	-.0420	
.953			-.1730				
.965	-.1470						





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TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 LOWER MING

(R00L03)

SECTION ( 1 ) LOWER MING

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070

Y/BW  
X/CW

.195	.299	.364	.427	.534	.673	.780	.887
.177			.5130	.6120	.5270	.4850	.5100
.229	.0600	.2520					
.246				.4350	.4040	.4820	.4850
.250	.1590			.3140	.4260		.3750
.362	.400		.2810				
.402	.497	.5000		.2450	.2760		
.590			.2140				
.565						.1750	.2110
.600					.0980		
.650	.2150			.1130		.0760	.0610
.700			.0910		.0580	.0340	
.725			.0190				
.750							
.760							
.775							
.818							
.834	.0490						
.850			.02700				
.857							
.865	-.1210						
.900	-.1930						
.905			-.1700				
.930							
.953			-.2350				
.965	-.3120						

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050

Y/BW  
X/CW

.000	.299	.364	.427	.534	.673	.780	.887
.050	-.1300	-.1300	.2870	.7670	.7210	.7360	.6120
.081		.0900	.3240	.3150	.5180	.5440	.5510
.186							
.094	.0210						
.150							
.177	.1180		.2670	.5340	.5700	.4780	.4870
.229		.1900					
.246				.4260	.4100	.4600	.4560
.250							
.362	.1040			.3070	.3940		.3560
.410			.3310				
.402							
.497	.4510						

AMES 97-707 1A9 02A + S3 + T9 LOWER WING

(RBCLOS)

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.550							
.565			.1710	.2260	.2520		
.600						.1540	.1920
.650					.0750		
.700	.1690			.1020		.0550	.0430
.725							
.750							
.760		.0590					
.775			.0260	.0260	-.0070		
.808			-.0070				
.834	.0360						
.850				-.0740	-.0310	-.0540	
.857			.0200				
.865	-.1340						
.900	-.2060			-.1250			-.0800
.905			-.1840				
.950				-.1710	-.1440	-.1380	
.953			-.2530				
.965	-.3250						

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.080

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.140							
.050	-.3320	-.2680	.0330	.6130	.5870	.5880	.4800
.081			.3670	.3960	.4170	.4020	.4200
.086		-.0400					
.094	.0150			.3110	.3580	.3460	.3650
.150							
.177			.3140				
.229	.0020						
.246	.1600						
.250				.2100	.2530	.3240	.3390
.362	.0400						
.400				.1800	.2810		.2690
.402			.1020				
.497	.1770						
.550			.1310	.1600	.2000		
.565							
.600							.1580
.650						.1210	
.700	.1080				.0400		
.725				.0150			
.750						.0170	.1430
.760			-.0250				
.775				-.0410	-.0310		

AFCO 97-707 1A9 OCA + S3 + T9 LOWER WING

(R80L03)

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.080

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.808							
.834	-.1010						
.850							
.857							
.865	-.2310						
.900	-.2850						
.905							
.950							
.953							
.965	-.1710						

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.110

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.808							
.834	-.3590	-.2670	.0410	.4550	.4770	.4770	.4350
.850				.3300	.3410	.3310	.3790
.857							
.865							
.900							
.905							
.950							
.953							
.965							

.1260

-.2220

-.1800

-.1540

-.3070

-.1710

.2640

.2570

.3020

.2750

.3250

.1640

.1820

.2490

.2960

.1100

.1930

.2260

.0900

.1240

.0720

.0710

.0060

-.0120

-.0310

-.0610

-.0450

-.1370

-.1470

-.0980

-.0980

.0020

-.1960

-.1520

-.2000

-.2400

-.1910

-.1650

-.3210

(RBD003)

AMES 97-707 1A9 02A + S3 + T9 LOWER WING

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.115

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.965	-.1880						

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 9.140

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.500	-.2900	-.2390	-.0570	.3250	.3860	.4260	.3500
.550			.2520	.2380	.2840	.2780	.3090
.600		-.1680					
.650	.0070						
.700				.1500	.2420	.2300	.2510
.750			.1900				
.800							
.850							
.900							
.950							
.965							

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.500	-.2900	-.2390	-.0570	.3250	.3860	.4260	.3500
.550			.2520	.2380	.2840	.2780	.3090
.600		-.1680					
.650	.0070						
.700				.1500	.2420	.2300	.2510
.750			.1900				
.800							
.850							
.900							
.950							
.965							

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.500	-.2900	-.2390	-.0570	.3250	.3860	.4260	.3500
.550			.2520	.2380	.2840	.2780	.3090
.600		-.1680					
.650	.0070						
.700				.1500	.2420	.2300	.2510
.750			.1900				
.800							
.850							
.900							
.950							
.965							

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.500	-.2900	-.2390	-.0570	.3250	.3860	.4260	.3500
.550			.2520	.2380	.2840	.2780	.3090
.600		-.1680					
.650	.0070						
.700				.1500	.2420	.2300	.2510
.750			.1900				
.800							
.850							
.900							
.950							
.965							

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.500	-.2900	-.2390	-.0570	.3250	.3860	.4260	.3500
.550			.2520	.2380	.2840	.2780	.3090
.600		-.1680					
.650	.0070						
.700				.1500	.2420	.2300	.2510
.750			.1900				
.800							
.850							
.900							
.950							
.965							

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.500	-.2900	-.2390	-.0570	.3250	.3860	.4260	.3500
.550			.2520	.2380	.2840	.2780	.3090
.600		-.1680					
.650	.0070						
.700				.1500	.2420	.2300	.2510
.750			.1900				
.800							
.850							
.900							
.950							
.965							

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.500	-.2900	-.2390	-.0570	.3250	.3860	.4260	.3500
.550			.2520	.2380	.2840	.2780	.3090
.600		-.1680					
.650	.0070						
.700				.1500	.2420	.2300	.2510
.750			.1900				
.800							
.850							
.900							
.950							
.965							

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.500	-.2900	-.2390	-.0570	.3250	.3860	.4260	.3500
.550			.2520	.2380	.2840	.2780	.3090
.600		-.1680					
.650	.0070						
.700				.1500	.2420	.2300	.2510
.750			.1900				
.800							
.850							
.900							
.950							
.965							

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.500	-.2900	-.2390	-.0570	.3250	.3860	.4260	.3500
.550			.2520	.2380	.2840	.2780	.3090
.600		-.1680					
.650	.0070						
.700				.1500	.2420	.2300	.2510
.750			.1900				
.800							
.850							
.900							
.950							
.965							

MACH ( 2 ) = 2.100 BETAT ( 1 ) = -8.300

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.500	-.2900	-.2390	-.0570	.3250	.3860	.4260	.3500
.550			.2520	.2380	.2840	.2780	.3090
.600		-.1680					
.650	.0070						
.700				.1500	.2420	.2300	.2510
.750			.1900				
.800							
.850							
.900							
.950							
.965							

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TABULATED PRESSURE DATA - 1A9B  
AMES 97-707 1A9 OCA + S3 + T9 LOWER WING

(RBLD 03)

DEPENDENT VARIABLE CF

SECTION (1) LOWER WING

MACH (2) = 2.0000 SETAT (3) = -0.300

Y/BW X/CW	.299	.36	.427	.534	.673	.780	.887
.150			.3050				
.177							
.229	.1410						
.246		.2330					
.250				.2890	.3340	.4030	.4390
.362	.1430			.2580	.4680		.4360
.400			.3830				
.402							
.497	.1480		.3870	.5370	.5400		.1570
.590							
.565						.4390	
.600							
.690					.3030		
.700	.3770			.2190		.3030	.2890
.725			.1820		.1440	.1860	
.750			.1530				
.760							
.775							
.806							
.834	.2240			.0670	.1190	.1590	
.850			.0000				
.857							.1450
.865	.1090			.0630			
.900	.0460		.0720	.0180	.0150	.0610	
.905							
.950			-.0070				
.953	-.0080						
.965							
Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW	.0180	.0240	.4320	.9900	.8860	.9070	.6700
.000				.3060	.3210	.3760	.4250
.050			.1000				
.080		.1410					
.086				.3000	.3920	.3990	.4250
.094	.1080						
.130							
.170		.2500					
.229	.1080						
.246		.2180					
.250				.2520	.3090	.3730	.4060
.362	.1210			.2060	.3940		.3920
.400			.3390				
.402							
.497	.1200						

ANES 97-707 1A9 02A + S3 + T9 LOWER WING

(RBD003)

SECTION ( 1 ) LOWER WING		DEPENDENT VARIABLE CP									
MACH ( 2 ) = 2.000	BETAT ( 3 ) = -6.250	Y/BW	.299	.364	.427	.534	.673	.780	.897		
		X/CW									
		.550									
		.565			.3190	.4300	.4690				
		.600							.2640		
		.650							.4000		
		.705	.2600			.2060	.2860				
		.725									
		.750									
		.760			.1780	.1320	.1870				
		.775			.1260						
		.808							.3500	.2170	
		.834	.1620			.0660	.1130	.1520			
		.850			.0000						
		.857			.0000						
		.865	.0980			.0350					.1420
		.900	.0170		.0280						
		.905				.0170	-.0030	.0560			
		.950									
		.953			-.0270						
		.965	-.1140								
		Y/BW	.299	.364	.427	.534	.673	.780	.897		
		X/CW									
		.100									
		.150	-.0270	-.0350	.3630	.9050	.8290	.8420	.8020		
		.181				.2630	.2650	.3190	.3700		
		.186		.1080	.2420						
		.194									
		.190				.2390	.3500	.3580	.3810		
		.177			.2130						
		.229	.1870								
		.246		.1790							
		.250				.2250	.2680	.3350	.3770		
		.362	.0960								
		.400				.1730	.3580		.3820		
		.402			.3020						
		.497	.1560								
		.550				.3950	.4110				
		.565			.2840						
		.600							.2260		
		.650						.4340			
		.700	.1930			.2160	.2800				
		.725									
		.750							.2880	.2180	
		.760			.1450						
		.775				.1060	.1550				

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.200

AMES 97-707 1A9 OSA + S3 + T9 LOWER WING (RBOLD3)

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETA ( 3 ) = -4.200	Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW									
.808					.1280				
.834			.1180			.0210	.0810	.1290	
.850					.0000				
.857									
.865			.0590						.1280
.920			.0120						
.905									
.950									
.953									
.965									

MACH ( 2 ) = 2.000 BETA ( 4 ) = 3.970

Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW							
.808							
.834							
.850							
.857							
.865							
.920							
.905							
.950							
.953							
.965							

AMES 97-707 1A9 ORA + S3 + T9 LOWER WING

## DEPENDENT VARIABLE CP

## SECTION ( 1 ) LOWER WING

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.070

Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW	.965	-.1550					

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 6.030

Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW	.000	-.2010	-.0190	.5010	.5000	.5550	.5020
	.090			.1770	.2420	.3000	.3420
	.081		.1210				
	.086	-.0300					
	.094	-.0260		.1930	.3290	.3030	.3090
	.150		.1710				
	.177	.0050					
	.229	.0320		.1740	.2060	.2550	.2750
	.246			.0950	.2400		.2530
	.250	.0010	.0380				
	.362			.0520	.1220		.1500
	.400		-.0180			.1120	
	.402	.0850					.1420
	.497						
	.550	-.0560		-.0140			
	.565						
	.600						
	.650						
	.700						
	.725						
	.750						
	.760						
	.775						
	.808						
	.834						
	.850						
	.857						
	.865						
	.900						
	.905						
	.950						
	.953						
	.965						

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.080

Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW	.140	-.2010	-.1000	.3580	.5820	.6140	.5410
	.050			.1840	.3310	.3600	.3660
	.081		.0790				
	.086	-.0600					
	.094	-.1460					



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TABULATED PRESSURE DATA - 1A98  
AMES 97-757 1A9 O2A + S3 + T9 LOWER WING

(RBOLO3)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.080

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.150				.1860	.3570	.3020	.3260
.177			.1530				
.229	-.0320						
.246		-.0110		.1770	.2010	.2530	.2870
.250							
.362	-.0550			.1080	.2380		.2690
.400			.0050				
.402							
.497	.0610			.1610	.1550		
.550			.0730				.1660
.565							
.600						.1800	
.650					.0900		
.700	.0140			.0640		.0750	.0940
.725							
.750							
.760			-.0060	.0150	.0330		
.775							
.808			-.0500				
.834	-.0740			-.0570	-.0110	.0010	
.850			.0000				
.857							
.865	-.1140			-.0960			-.0320
.910	-.1430						
.915			-.1450				
.950				-.1210	-.0840	-.0650	
.953			-.1770				
.965	-.1750						



ABLATED PRESSURE DATA - 1A98

ALLES 97-707 1A9 02A + S3 + T9 LOWER WING (RBOL04)

SECTION 1 - LOWER WING

MACH (1.0 = 1.555) BETAT 2.0 = -0.070

DEPENDENT VARIABLE CP	Y/BW	X/CW
.150	.299	.364
.177	.427	.534
.229	.673	.780
.246	.887	.687
.250	.2730	.6220
.362	.4630	.4480
.400	.3490	
.402	.3390	
.497	.2390	.2400
.550	.2110	
.555		
.600		
.650		
.700	.1550	
.725	.0750	
.750	.1010	
.760	.0500	.0320
.775	.0460	.0120
.808	.0220	
.834	.0590	
.850		
.857	.0270	
.865	.1110	
.900	.1180	
.905	.1670	
.950	.1560	.1340
.953	.2410	
.965	.3140	

MACH (1.0 = 1.555) BETAT 1.0 = -0.070

DEPENDENT VARIABLE CP	Y/BW	X/CW
.150	.299	.364
.177	.427	.534
.229	.673	.780
.246	.887	.687
.250	.2730	.6220
.362	.4630	.4480
.400	.3490	
.402	.3390	
.497	.2390	.2400
.550	.2110	
.555		
.600		
.650		
.700	.1550	
.725	.0750	
.750	.1010	
.760	.0500	.0320
.775	.0460	.0120
.808	.0220	
.834	.0590	
.850		
.857	.0270	
.865	.1110	
.900	.1180	
.905	.1670	
.950	.1560	.1340
.953	.2410	
.965	.3140	

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 LOWER MING

(RBL04)

SECTION ( 1 ) LOWER MING

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.1440

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.550			.1540	.1920	.2100		.1600
.565						.1270	
.600							
.650							
.700	.1450			.0650			
.725							
.750							
.760			.0450				
.775							
.800							
.834	.0360						
.850							
.857			.0200				
.865	-.1250						
.900	-.2010						
.905							
.950							
.953							
.965	-.3230						

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 3.060

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.600							
.650	-.3090	-.2550	.1020	.6480	.5840	.6020	.5390
.681				.2930	.3630	.3180	.3220
.686							
.694	-.1020						
.700							
.717							
.729	-.1030						
.746							
.750							
.762	-.1410						
.760							
.792							
.797	.1590						
.850							
.860							
.850							
.700	.0670						
.725							
.750							
.760							
.775							

DATE 21 SEP 68

TABULATED PRESSURE DATA - 1A98

AWC'S 97-717 1A9 CBA + S3 + T9 LOWER WING

(RECOLLUM)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.062

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.867
.808			-.0970				
.834	-.1080						
.850				-.1510	-.1150	-.1110	
.857			.0600				
.865	-.2360						
.917	-.2970			-.1770			-.1470
.915			-.2540				
.950				-.2140	-.2060	-.1780	
.953			-.3110				
.965	-.1880						

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.082

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.867
.000							
.000	-.3310	-.2110	.1030	.5260	.5070	.4820	.4400
.081			.2870	.2770	.2630	.2440	.2700
.086		-.0130					
.094	-.0730			.2170	.2320	.2080	.2140
.150			.2280				
.177							
.229	.0280						
.246		.2120					
.257				.1190	.1380	.1870	.2470
.362	.1590			.0780	.1670		.1950
.400							
.412			.1270				
.497	.1130			.0550	.1430		
.550			-.0160				
.565							
.600							
.650						.0440	.0780
.710	-.0750			-.1250	-.0580		
.725							
.750			-.0750			-.0500	-.0590
.760							
.775				-.0970	-.1180		
.808			-.1510				
.834	-.1330			-.1730	-.1360	-.1510	
.850			.0440				
.857							
.865	-.2490						
.910	-.2580			-.2180			-.1770
.915			-.2870				
.950				-.2540	-.2010	-.2240	
.953			-.3380				

DATE 21 SEP 75

TABULATED PRESSURE DATA - 1A98  
AMES 97-757 1A9 02A + S3 + T9 LOWER WING

(RBOLU4)

DEPENDENT VARIABLE CP

SECTION ( 1 ) LOWER WING

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.080

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.100

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.965	-.2040						
Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.000	-.2770	-.2140	.0220	.3940	.4290	.4620	.3840
.050			.2180	.2070	.2230	.2140	.2060
.081							
.086	-.0580						
.094							
.150				.1230	.2230	.1620	.1810
.177			.1700				
.229	-.0430	.1540					
.246				.0540	.0970	.1510	.1640
.250							
.362	.0580			.0350	.1290		.1130
.410							
.412			-.0360				
.497	-.0240			.0890	.0980		
.550			.0560				.0230
.565							
.610						.0160	
.650					-.0520		
.710				-.0450			
.724							
.750						-.0670	-.0240
.760							
.775				-.0960	-.1120		
.818							
.834	-.1120						
.850				-.1940	-.1440	-.1560	
.857							
.865	-.2120						
.910	-.2190			-.2540			-.2020
.915							
.940				-.2870			
.950					-.2330	-.2160	
.953							
.965	-.1920			-.2960			

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.270

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.144							
.150	.0230	.0830	.4580	1.0220	.9540	.3660	.9350
.181				.2730	.2240	.2440	.2810
.186							
.194	.1530		.2670				







DATE 21 SEP 79 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 OSA + S3 + T9 LOWER WING (R80L04)

SECTION ( 1 ) LOWER WING DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000	BETAT ( 3 ) = -4.200	Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
		.808			.0900				
		.834	.1120			.0420	.0910	.1500	
		.850			.0000				
		.857							
		.865	.0360			.0050			-.0240
		.900	-.0170						
		.905			-.0090				
		.950				-.0320	-.0130	.0380	
		.953			-.0460				
		.965	-.1210						

MACH ( 2 ) = 2.000	BETAT ( 4 ) = 3.990	Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
		.000			.0900	.5630	.5340	.5760	.5780
		.090	-.1530	-.1660		.1450	.1520	.1600	.1680
		.081			.1270				
		.086		-.0270					
		.094	-.0210			.1140	.1870	.1910	.2190
		.190			.1090				
		.177							
		.229	-.0130						
		.246		.0660					
		.290				.1320	.1680	.2210	.2500
		.362	.0360			.1210	.2060		.2930
		.400			.0600				
		.402							
		.497	.0840			.1640	.1060		
		.550			.0190				
		.565							
		.600							.1470
		.650					.0900		
		.700	-.0500			.0110	.0130		
		.725						.0210	.0280
		.790							
		.780			-.0130				
		.775				-.0360	-.0640		
		.818			-.0400				
		.834	-.0120						
		.850				-.0940	-.0510	-.0120	
		.857			.0000				
		.865	-.0820						
		.941	-.1300			-.1190			-.0670
		.915			-.1110				
		.950				-.1220	-.1140	-.0910	
		.953			-.1470				



DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 LOWER WING

(R00104)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.030

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.150			.0900	.1480	.3490	.2920	.2790
.177	-.0230	-.0240					
.229							
.246				.1960	.1920	.2270	.2450
.250	-.0560			.0620	.2000		.2390
.362			-.0300				
.400							
.402	.0240			.1130	.1060		
.497			.0380				.1070
.550						.0970	
.565							
.600				.1480	.0760	.0440	.0110
.650	-.0160						
.700							
.725							
.750							
.760			-.0140				
.775				-.0210	.0200		
.808							
.834	-.0920						
.850				-.0700	-.0310	-.0180	
.857			.0000				
.865	-.1290						
.900	-.1490			-.1140			-.0560
.915			-.1520				
.950				-.1420	-.0990	-.0710	
.953			-.1860				
.965	-.1670						

ANES 97-707 1A9 CEA + S3 + T9 LOWER WING

(RBDLOS) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 59. FT. XGRP = 28.5300 INCHES  
LREF = 39.8490 INCHES YGRP = .0000 INCHES  
BREF = 39.8490 INCHES ZGRP = .0000 INCHES  
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 2.000 ORBINC = .900  
RUDDER = .000 ELEVON = .000  
RUOFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) LOWER WING

MACH ( 1 ) = 1.555 EETAT ( 1 ) = -7.100

Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW	.000	.0630	.4110	.8590	.8120	.8400	.8230
.050				.1880	.1320	.1510	.3500
.081		.0630	.1770				
.086							
.124	.0610			.2800	.3240	.5070	.4650
.150			.3320				
.177							
.229	.0480						
.246		.1190		.3310	.4870	.4700	.4250
.250				.3730	.4150		.3440
.362	.0420		.3710				
.400							
.412							
.497	.3940		.2830	.2580			
.550							
.565							.1840
.600						.1560	
.650	.2450			.1330		.0580	.0370
.700							
.725			.1200		.0610	.0130	
.750			.0450				
.760							
.775							
.818							
.834	.0850			-.0380	-.0380	-.0440	
.850			.0000				
.857							
.865	-.0910						
.900	-.1700		-.1560	-.0970			-.0890
.915							
.950			-.1520	-.1270	-.1280		
.953			-.2330				
.965	-.3060						

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070

Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW	.000	.0630	.4110	.8590	.8120	.8400	.8230
.050				.1880	.1320	.1510	.3500
.081		.0630	.1770				
.086							
.124	.0610			.2800	.3240	.5070	.4650
.150			.3320				
.177							
.229	.0480						
.246		.1190		.3310	.4870	.4700	.4250
.250				.3730	.4150		.3440
.362	.0420		.3710				
.400							
.412							
.497	.3940		.2830	.2580			
.550							
.565							.1840
.600						.1560	
.650	.2450			.1330		.0580	.0370
.700							
.725			.1200		.0610	.0130	
.750			.0450				
.760							
.775							
.818							
.834	.0850			-.0380	-.0380	-.0440	
.850			.0000				
.857							
.865	-.0910						
.900	-.1700		-.1560	-.0970			-.0890
.915							
.950			-.1520	-.1270	-.1280		
.953			-.2330				
.965	-.3060						

DATE 21 SEP 79

TABULATED PRESSURE DATA - 1A98

(RBDLOS)

AMES 97-707 1A9 02A + S3 + T9 LOWER MINE

DEPENDENT VARIABLE CP

SECTION ( 1 ) LOWER MINE

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.070

Y/BW .299 .364 .427 .534 .673 .780 .887  
X/CW .150 .177 .229 .246 .250 .362 .400 .402 .497 .590 .565 .600 .650 .700 .725 .750 .760 .775 .808 .834 .890 .857 .865 .900 .905 .950 .953 .965

.1680 .1380 .4050 .2350 .1960 .0630 .0710 .0150 .0000 .0310 .0630 .0610 .0980 .1560 .2360

.2340 .3040 .2470 .4920 .1780 .3560 .4810 .4420 .4090 .4080 .3340 .1600 .1340 .0990 .0290 .0080

.2130 .2800 .2170 .2370 .1680 .1960 .2980 .4310 .3230 .4020 .3280 .2560

.1010 .0990 .1010 .0130 .0130 .2010

.246 .250 .362 .400 .402 .497 .590 .565 .600 .650 .700 .725 .750 .760 .775 .808 .834 .890 .857 .865 .900 .905 .950 .953 .965

.299 .364 .427 .534 .673 .780 .887

.150 .177 .229 .246 .250 .362 .400 .402 .497 .590 .565 .600 .650 .700 .725 .750 .760 .775 .808 .834 .890 .857 .865 .900 .905 .950 .953 .965

.1680 .1380 .4050 .2350 .1960 .0630 .0710 .0150 .0000 .0310 .0630 .0610 .0980 .1560 .2360

.2340 .3040 .2470 .4920 .1780 .3560 .4810 .4420 .4090 .4080 .3340 .1600 .1340 .0990 .0290 .0080

.2130 .2800 .2170 .2370 .1680 .1960 .2980 .4310 .3230 .4020 .3280 .2560

.1010 .0990 .1010 .0130 .0130 .2010

.246 .250 .362 .400 .402 .497 .590 .565 .600 .650 .700 .725 .750 .760 .775 .808 .834 .890 .857 .865 .900 .905 .950 .953 .965

.299 .364 .427 .534 .673 .780 .887

.150 .177 .229 .246 .250 .362 .400 .402 .497 .590 .565 .600 .650 .700 .725 .750 .760 .775 .808 .834 .890 .857 .865 .900 .905 .950 .953 .965

.1680 .1380 .4050 .2350 .1960 .0630 .0710 .0150 .0000 .0310 .0630 .0610 .0980 .1560 .2360

.2340 .3040 .2470 .4920 .1780 .3560 .4810 .4420 .4090 .4080 .3340 .1600 .1340 .0990 .0290 .0080

.2130 .2800 .2170 .2370 .1680 .1960 .2980 .4310 .3230 .4020 .3280 .2560

.1010 .0990 .1010 .0130 .0130 .2010

.246 .250 .362 .400 .402 .497 .590 .565 .600 .650 .700 .725 .750 .760 .775 .808 .834 .890 .857 .865 .900 .905 .950 .953 .965

.299 .364 .427 .534 .673 .780 .887

.150 .177 .229 .246 .250 .362 .400 .402 .497 .590 .565 .600 .650 .700 .725 .750 .760 .775 .808 .834 .890 .857 .865 .900 .905 .950 .953 .965

.1680 .1380 .4050 .2350 .1960 .0630 .0710 .0150 .0000 .0310 .0630 .0610 .0980 .1560 .2360

.2340 .3040 .2470 .4920 .1780 .3560 .4810 .4420 .4090 .4080 .3340 .1600 .1340 .0990 .0290 .0080

.2130 .2800 .2170 .2370 .1680 .1960 .2980 .4310 .3230 .4020 .3280 .2560

.1010 .0990 .1010 .0130 .0130 .2010

.246 .250 .362 .400 .402 .497 .590 .565 .600 .650 .700 .725 .750 .760 .775 .808 .834 .890 .857 .865 .900 .905 .950 .953 .965

.299 .364 .427 .534 .673 .780 .887

.150 .177 .229 .246 .250 .362 .400 .402 .497 .590 .565 .600 .650 .700 .725 .750 .760 .775 .808 .834 .890 .857 .865 .900 .905 .950 .953 .965

.1680 .1380 .4050 .2350 .1960 .0630 .0710 .0150 .0000 .0310 .0630 .0610 .0980 .1560 .2360

.2340 .3040 .2470 .4920 .1780 .3560 .4810 .4420 .4090 .4080 .3340 .1600 .1340 .0990 .0290 .0080

.2130 .2800 .2170 .2370 .1680 .1960 .2980 .4310 .3230 .4020 .3280 .2560

.1010 .0990 .1010 .0130 .0130 .2010

.246 .250 .362 .400 .402 .497 .590 .565 .600 .650 .700 .725 .750 .760 .775 .808 .834 .890 .857 .865 .900 .905 .950 .953 .965

.299 .364 .427 .534 .673 .780 .887

.150 .177 .229 .246 .250 .362 .400 .402 .497 .590 .565 .600 .650 .700 .725 .750 .760 .775 .808 .834 .890 .857 .865 .900 .905 .950 .953 .965

.1680 .1380 .4050 .2350 .1960 .0630 .0710 .0150 .0000 .0310 .0630 .0610 .0980 .1560 .2360

.2340 .3040 .2470 .4920 .1780 .3560 .4810 .4420 .4090 .4080 .3340 .1600 .1340 .0990 .0290 .0080

.2130 .2800 .2170 .2370 .1680 .1960 .2980 .4310 .3230 .4020 .3280 .2560

.1010 .0990 .1010 .0130 .0130 .2010

.246 .250 .362 .400 .402 .497 .590 .565 .600 .650 .700 .725 .750 .760 .775 .808 .834 .890 .857 .865 .900 .905 .950 .953 .965

.299 .364 .427 .534 .673 .780 .887

.150 .177 .229 .246 .250 .362 .400 .402 .497 .590 .565 .600 .650 .700 .725 .750 .760 .775 .808 .834 .890 .857 .865 .900 .905 .950 .953 .965

.1680 .1380 .4050 .2350 .1960 .0630 .0710 .0150 .0000 .0310 .0630 .0610 .0980 .1560 .2360

.2340 .3040 .2470 .4920 .1780 .3560 .4810 .4420 .4090 .4080 .3340 .1600 .1340 .0990 .0290 .0080

.2130 .2800 .2170 .2370 .1680 .1960 .2980 .4310 .3230 .4020 .3280 .2560

.1010 .0990 .1010 .0130 .0130 .2010

AMES 97-707 1A9 OSA + S3 + T9 LOWER WING (R00L05)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.050

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.550				.1940	.1960		
.565			.1610				.1430
.600							
.650						.1120	
.700	.1640				.0330		
.725				.0480			
.750						.0090	-.0140
.780			.0270				
.775				-.0210	-.0510		
.806			-.0180				
.834	.0260						
.850				-.0970	-.0980	-.1040	
.857			.0000				
.865	-.1280						
.900	-.2030			-.1420			-.1370
.905			-.1780				
.950				-.1710	-.1880	-.1820	
.953			-.2540				
.965	-.3280						

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.050

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.000	-.2550	-.2340	.1460	.6960	.6050	.6030	.5790
.050				.3130	.2140	.2470	.2290
.081			.1580				
.186		-.0740					
.194	-.0530						
.150				.2510	.2590	.2460	.2270
.177			.2680				
.229	-.0670						
.246		.0310					
.250				.1640	.2000	.2000	.2060
.362	-.0220						
.410				.0940	.1790		.1730
.412			.0860				
.497	.1110						
.550				.1170	.1460		
.565			.0780				
.610							.0360
.650					-.0290	.0680	
.710	.0270						
.725				-.1150			
.750						-.1450	-.1490
.760			-.0590				
.775				-.0760	-.1690		

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
 AWES 97-707 1A9 02A + S3 + T9 LOWER WING

(R80105)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.050

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.808							
.834	-.0980		-.1070				
.850				-.1690	-.1190	-.1370	
.857		.0000					
.865	-.2240			-.2180			-.1730
.900	-.2790						
.905		-.2590		-.2420	-.2210	-.1940	
.950			-.3190				
.953							
.965	-.2090						

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.070

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.808							
.834							
.850	-.3030	-.2260	.1490	.5920	.5170	.4930	.4630
.857			.2430	.1980	.1810	.1410	.1560
.865		-.0030					
.900	-.0980			.1690	.1890	.1340	.1630
.905			.2140				
.950		.1760					
.953				.1620	.1840	.1450	.1720
.965				.1470	.1140		.1300
			-.0170				
				.1110	.1230		
			-.1420				.0160
					-.1880		
				-.1680		-.1630	-.1960
			-.1040				
				-.1140	-.1550		
			-.1570				
				-.1840	-.1410	-.1680	
			.1110				
				-.2320			-.1870
			-.2950				
				-.2720	-.2160	-.2410	
			-.3480				

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 OCA + S3 + T9 LOWER WING

(RBOLUS)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE C<sub>F</sub>

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.070

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.965	-.2179						

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.080

Y/BW X/CW	.259	.364	.427	.534	.673	.780	.887
.100	-.2730	-.1720	.0770	.4300	.4460	.4860	.4330
.050				.1350	.1390	.1470	.1130
.181			.1820				
.186	-.0550						
.084	-.0570						
.190				.1010	.2225	.1340	.1070
.177			.1300				
.229	-.0570						
.246		.1170					
.290				.0210	.1850	.1960	.1020
.362	-.1080			.1470	.0780		.0640
.410							
.412							
.497	.0120			.1800	.1380		
.530							
.565							
.620							
.690							
.700	-.0330			-.1690	-.1850	-.1250	-.1320
.725							
.750							
.780							
.775				-.1120	-.1390		
.808							
.834	-.1360						
.850				-.1960	-.1520	-.1880	
.857							
.865	-.1900						
.900	-.1810			-.2570			-.2220
.905							
.950				-.2710			
.953							
.965	-.2100			-.2960	-.2400	-.2370	

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.280

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.140							
.140	.0180	.1080	.4360	.9820	.9160	.9570	.9420
.181			.2180	.1850	.1200	.1350	.1190
.186		.1330					
.194	.1220						





ANES 97-707 1A9 ORA + S3 + T9 LOWER WING

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE (P

MACH ( 2 ) = 2.1400 BETAT ( 2 ) = -6.25U

(RBOLUS)

Y/BW  
X/CW

.550	.299	.364	.427	.534	.673	.78U	.887
.565			.209U	.267U	.156U		
.62U							.181U
.65U							
.70U	.175U				.167U	.128U	
.725							
.75U							
.76U			.135U			.064U	.062U
.775				.115U	.147U		
.8U8			.176U				
.834	.049U						
.85U				.063U	.088U	.075U	
.857			.044U				
.865	.084U						
.94U	.044U			.044U			-.034U
.9U5			.011U				
.95U				-.012U	-.014U	.036U	
.953			-.046U				
.965	-.115U						

MACH ( 2 ) = 2.0000 BETAT ( 3 ) = -4.14U

Y/BW  
X/CW

.14U	.299	.364	.427	.534	.673	.78U	.887
.05U	-.039U	.010U	.358U	.876U	.782U	.813U	.827U
.081				.133U	.059U	.076U	.067U
.046		.065U	.156U				
.094	.017U						
.15U				.122U	.164U	.155U	.165U
.177			.147U				
.229	.061U						
.246	.089U						
.25U				.114U	.139U	.176U	.194U
.362	.037U						
.41U				.173U	.292U		.214U
.412			.203U				
.497	.028U						
.55U				.221U	.137U		
.565			.174U				
.65U							.153U
.65U						.089U	
.74U	.136U				.136U		
.725				.083U			
.75U						.032U	.035U
.76U			.056U				
.775				.096U	.123U		

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ANES 97-787 1A9 02A + S3 + T9 LOWER WING

(RBDLOS)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.140

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.808			.0800				
.834	.0380			.0130	.0730	.0370	
.850			.0000				
.857							
.865	.0770			.0320			-.0560
.920	-.0140						
.905			-.0130	-.0230	-.0350	.0250	
.950							
.953			-.0570				
.965	-.1280						

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.940

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.000	-.1280	-.1280	.0960	.5620	.4980	.5390	.5830
.140				.0910	.0520	.0570	.0480
.161			.0920				
.166		-.0390					
.194	-.0400			.0520	.1160	.1110	.1040
.190			.0700				
.177							
.229	-.0240	.0470					
.246				.0590	.0930	.1230	.1510
.290							
.362	.0120			.0640	.2350		.2120
.414			.0240				
.412				.0480	.0880		
.497	.0610		.0130				.1190
.550							
.565							
.614						.0620	
.650	-.0560			-.0350	-.0120		
.714						-.0180	.0440
.725							
.750				-.0340	-.0550		
.760			-.0400				
.775			-.0360				
.818							
.834	-.0340			-.0930	-.0470	-.0760	
.850			.0440				
.857							
.865	-.0760			-.1220			-.1080
.924	-.1290						
.915			-.1230	-.1430	-.1230	-.0930	
.950			-.1630				
.953							

AMES 97-757 1A9 02A + S3 + T9 LOWER WING

(RBCLUS)

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.940

	Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW	.965	-.1590						

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.980

	Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW	.120	-.1570	-.1640	.1440	.4110	.4080	.4990	.5080
	.190				.1690	.1640	.1570	.1710
	.181			.1550				
	.186		-.1680					
	.194	-.1690						
	.190				.1470	.1020	.1140	.1170
	.177			.1570				
	.229	-.10360						
	.246		.1200					
	.250				.1010	.1120	.1460	.1470
	.362	-.1250			.1640	.2050		.2300
	.400			-.1070				
	.402							
	.497	.1420						
	.550				-.1010	.0350		
	.565			-.10570				
	.600						.1040	.1760
	.690							
	.700	-.10710			-.10470			
	.725							
	.750				-.10300		-.10450	-.10370
	.760			.10120				
	.775				-.10290	-.10700		
	.800			-.10250				
	.834	-.10800						
	.850				-.10710	-.10890	-.10900	
	.857			.10200				
	.865	-.1230						
	.900	-.1570			-.10090			-.1160
	.905			-.1420				
	.950				-.1400	-.1450	-.1250	
	.953			-.1840				
	.965	-.1750						

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.020

	Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW	.100	-.1720	-.1830	.1440	.3640	.4260	.5530	.5710
	.150				.1430	.1870	.1310	.1260
	.181			.1230				
	.186		-.1080					
	.194							

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AMES 97-707 1A9 02A + S3 + T9 LOWER WING

(R80105)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE Cp

MACH ( 2 ) = 2.000 BETAY ( 6 ) = 8.125

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.150							
.177			.0410	.0500	.2570	.2040	.2490
.229	-.0670						
.246		-.0390					
.290				.1140	.1990	.2290	.2310
.362	-.0660			.1030	.1820		.2200
.410			-.0520				
.412							
.497	.0040			.0750	.0560		
.550			-.0080				.0710
.565							
.600						.0280	
.650					.0720		
.700	-.0310			.0340		.0180	-.0330
.725							
.750			-.0260				
.760					-.0410		
.775			-.0760	-.0190			
.818							
.834	-.0940			-.0920	-.0540	-.0300	
.850			.0220				
.857							
.865	-.1300						
.910	-.1410			-.1340			-.0850
.915			-.1650				
.950				-.1630	-.1210	-.0900	
.953			-.1960				
.965	-.1520						

**REFERENCE DATA**

SREF =	2.4210	94. FT.	YARP =	28.5300	INCHES
UREF =	39.0490	INCHES	YARP =	.0000	INCHES
BREF =	39.0490	INCHES	ZARP =	.0000	INCHES
SCALE =	.0300	SCALE			

DEPENDENT VARIABLE CP

SECTION ( 1 ) LOWER WING

**MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.190**

[illegible]

### PARAMETRIC DATA

ALPHAT =	.500	ORGBINC =	.500
RUDDER =	.500	ELEVON =	.500
RUDEFLA =	.500		

$$\text{BETA} ( 2 ) = -5.46\%$$







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TABULATED PRESSURE DATA - 1A98

(R00L06)

AMES 97-707 1A9 02A + S3 + T9 LOWER WING

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.050

Y/B/J X/CM	.299	.364	.427	.534	.673	.780	.887
.808			-.1350				
.834	-.1200						
.890				-.1910	-.1710	-.1670	
.857			.1420				
.865	-.2410			-.2320			-.2020
.910	-.2880						
.915			-.2700				
.950				-.2560	-.2360	-.2340	
.953			-.3280				
.965	-.2260						

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.060

Y/B/J X/CM	.299	.364	.427	.534	.673	.780	.887
.100							
.105	-.2580	-.1860	.2510	.5460	.4560	.4440	.4580
.161			.1870	.1020	.0220	.1670	.1510
.186		-.1250					
.194	-.1090			.0940	.2580	.1220	.1180
.190			.1380				
.177							
.229	-.0550						
.246		.1470					
.250				.1070	.0710	.0620	.1280
.362	.0940			.1230	.1670		.10920
.410							
.412			.0030				
.497	.0710			.1440	-.0260		
.550			-.0140				-.10270
.565						-.1420	
.610							
.650							
.710	-.0740			-.1340	-.1260		
.725						-.1010	-.1340
.750							
.760			-.1340				
.775				-.1740	-.1780		
.818			-.1940				
.834	-.2010						
.850				-.2020	-.2020	-.1920	
.857			.0740				
.865	-.2920						-.2170
.910	-.2160			-.2410			
.915			-.2970				
.950				-.2790	-.2450	-.2560	
.953							
.955			-.3470				



TABULATED PRESSURE DATA - 1A98

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AVES 97-707 1A9 02A + S3 + 19 LOWER WING

(RBD06)

DEPENDENT VARIABLE CP

SECTION ( 1 ) LOWER WING

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -6.290

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.190			.1820				
.177							
.229	.1210						
.246		.1440		.1390	.1570	.1820	.1780
.250				.2110	.3280		.2400
.362	.1060						
.400			.2470				
.412							
.497	.0740			.2710	.1580		
.550			.2180				.1690
.565							
.610							
.650	.1690			.1860	.1670	.1180	
.710						.1480	.1550
.725							
.750			.1340	.1150	.1400		
.780			.1680				
.775							
.818							
.834	.0690			.1150	.1640	.0920	
.850			.1220				
.857							
.865	.1080			.1290			-.1380
.910	.0110		.1040				
.915				-.1240	-.10180	.1260	
.950			-.1410				
.953							
.965	-.1110						
Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.140			.3910	.9170	.8430	.8460	.8940
.140	-.1010	.1920		.1110	.1300	.1360	.1270
.140			.1560				
.141		.1940					
.186							
.194	.1540			.1120	.1300	.1390	.1100
.190			.1400				
.177							
.229	.1690	.1150					
.246				.1130	.1180	.1320	.1390
.250							
.362	.1630			.1630	.2710		.1950
.400			.1950				
.412							
.497	.1390						

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.290

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TABULATED PRESSURE DATA - 1A98

(RBL016)

SECTION ( 1 ) LOWER WING

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.250		DEPENDENT VARIABLE CP			
		Y/BW	.299	.364	.427
		X/CW			
	.590			.534	.673
	.565			.1890	.1160
	.610				.1360
	.650				.1210
	.700	.1440		.1840	.1270
	.725				
	.750				
	.760			.1820	.1590
	.775			.1750	
	.808				
	.834	.1420		.1210	.1530
	.850			.1000	
	.857				
	.865	.0190		.1320	
	.920	.1090		.1010	
	.905				
	.950				
	.953				
	.965				

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -3.30

Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW							
.120			.2160	.5660	.6140	.6520	.6880
.150			.1490	.1330			
.181		.1420					
.186							
.194							
.190							
.177			.1580	.1310	.1260	.1220	.1130
.229		.1480					
.246							
.250							
.362		.1420		.1150	.1090	.1040	.1010
.411							
.412			.1680	.1190	.2080		.1740
.497		.1420					
.550			.1320	.1420	.1850		
.565							
.611							
.650						.1520	.1620
.711		.1060			.1110		
.725							
.750							
.760							
.775							

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TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 C2A + S3 + T9 LOWER WING

(RBOL06)

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SECTION ( 1 ) LOWER WING

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -.130

DEPENDENT VARIABLE CP

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.838			-.0420				
.834	-.0760			-.0440	-.0480	-.0560	
.830			.0420				
.857							-.0860
.865	-.0850			-.0750			
.911	-.0980						
.915			-.0960				
.950				-.1070	-.1010	-.0750	
.953			-.1350				
.965	-.1050						

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.950

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.164							
.190	-.1120	-.1180	.1170	.4610	.4210	.4430	.5790
.181			.0450	.0110	-.0510	-.0440	-.0650
.186		-.0580					
.194	-.0520			.0350	.0640	.1280	.0120
.150			.0360				
.177							
.229	-.0470	.0310					
.246				.1410	.1420	.0770	.0510
.250							
.362	-.0140			.0390	.1710		.1830
.400			-.1220				
.412							
.497	.0360			-.0110	.1410		
.550			-.0570				.1690
.565							
.611						.0320	
.691				-.0380			
.711	-.1190			-.0510		-.1290	-.0190
.725							
.751			-.0680				
.761				-.0510	-.0730		
.775			-.1450				
.818							
.834	-.1680			-.1920	-.0720	-.1910	
.850			.1440				
.857							
.865	-.1820			-.1250			-.1140
.911	-.1290						
.915			-.1370		-.1530	-.1310	-.1170
.951							
.953			-.1720				

AMES 97-707 1A9 CEA + S3 + T9 LOWER WING

(REBOL 16)

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.950

Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW	.965	-.1690					

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.980

Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW	.100	-.1470	-.1450	.0740	.4120	.3960	.4320
	.090				-.1030	-.0560	-.0530
	.081			.0290			
	.086	-.0740					
	.094	-.0780					
	.150			-.1460	.0620	.1020	.0080
	.177		.0310				
	.229	-.1630					
	.246	-.1270					
	.250			.1640	.1070	.1330	.1280
	.362	-.0900		.1050	.1440		.1680
	.410						
	.412		-.1650				
	.497	.0150		-.1010	.1280		
	.550		-.1690				
	.565						
	.610						
	.650						.1040
	.710	-.1180		-.1410	-.0730	-.1040	
	.725						
	.750					-.0720	-.0540
	.760		.1220				
	.775			-.1420	-.0720		
	.818		-.1470				
	.834	-.1030					
	.850			-.0710	-.1050	-.1110	
	.857		.0220				
	.865	-.1310					
	.910	-.1580		-.1220			-.1250
	.915		-.1570				
	.950			-.1570	-.1440	-.1330	
	.953		-.1940				
	.965	-.1040					

ANES 97-707 1A9 C2A + S3 + T9 LOWER WING

(RBOLDY) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -7.110

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.140	.0550	.1070	.3030	.8770	.7730	.8010	.8220
.150				-.0510	-.1140	-.1520	-.1680
.161		.0400	.0880				
.186							
.194	.0020			.1820	.1860	-.0140	-.0560
.195			.0910				
.177							
.229	.0230						
.246		.0980					
.250				.1020	.0870	.1270	.1020
.362	.0280			.2700	.3010		.2810
.400			.2270				
.412							
.497	.2820						
.550			.2210	.2300	.1990		.1630
.565							
.600						.1070	
.650							
.700	.2330			.0480	.0270	.0090	.0160
.725							
.750			.0280	-.0190	-.0450		
.760			-.0400				
.775							
.808							
.834	.0210			-.0980	-.0910	-.0960	
.850			.0400				
.857							
.865	.1230						
.900	.2030			-.1580			-.1140
.905			-.1880				
.950				-.1930	-.1910	-.1720	
.953			-.2610				
.965	-.3290						

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.090

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.140	.0670	.0610	.3310	.7410	.7080	.7410	.7790
.150				-.0940	-.1290	-.1360	-.1890
.161			.0590				
.186							
.194		.0220					
.195							
.177							
.229							
.246							
.250							
.362							
.400							
.412							
.497							
.550							
.565							
.600							
.650							
.700	.2330						
.725							
.750							
.760							
.775							
.808							
.834	.0210			-.0980	-.0910	-.0960	
.850			.0400				
.857							
.865	.1230						
.900	.2030			-.1580			-.1140
.905			-.1880				
.950				-.1930	-.1910	-.1720	
.953			-.2610				
.965	-.3290						

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TABULATED PRESSURE DATA - 1A98

AMES 97-757 1A9 C8A + S3 + T9 LOWER WING

(RESOLUTION)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -5.190

Y/BW X/CW	.299	.364	.427	.534	.673	.781	.887
.150							
.177			.0120	.0360	.1630	-.0480	-.0770
.229	.0220						
.246		.0640					
.250				.0880	.0610	.1110	.0410
.362	-.0190			.2190	.2520		.1170
.401			.1810				
.402							
.497	.2350			.2180	.1920		
.550			.1880				
.565							.1380
.621						.1030	
.651					.0480		
.700	.0900			.0140		-.0260	.0100
.725							
.751			.0140				
.761				-.0460	-.0780		
.775			-.0610				
.808	-.0160						
.834				-.1350	-.1280	-.1180	
.850			.0620				
.857							
.865	-.1490			-.1760			-.1220
.911	-.2180						
.905			-.2190				
.950				-.2110	-.2160	-.1940	
.953			-.2790				
.965	-.3470						

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.070

Y/BW X/CW	.299	.364	.427	.534	.673	.781	.887
.141							
.150	-.0510	.0150	.2780	.6470	.6490	.6880	.7340
.181				-.1180	-.1510	-.1640	-.2050
.186		.0150	.0110				
.194	-.0230						
.190				-.0420	.1210	-.0540	-.0940
.177			-.0160				
.229	.0120						
.246		.0320					
.250				.0790	.0430	.0810	.0220
.362	-.0420			.1770	.2110		.0990
.401							
.402			.1390				
.497	.1960						



DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 OCA + S3 + T9 LOWER WING

(RBD077)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.070

	Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW								
.530								
.565				.1110	.1580	.1490		.1110
.610							.1080	
.650								
.710		.0470						
.725								
.750								
.760								
.775								
.810								
.834								
.850								
.857								
.865								
.910								
.915								
.950								
.953								
.965								

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 5.140

	Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW								
.110								
.150								
.181								
.186								
.194								
.190								
.177								
.229								
.246								
.250								
.362								
.410								
.412								
.497								
.550								
.565								
.610								
.650								
.710								
.725								
.750								
.760								
.775								

AWES 97-707 1A9 ORA + S3 + T9 LOWER WING

(RECL:77)

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 4 ) = 5.040	Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
		.818			-.1630				
		.834	-.1670						
		.850				-.2010	-.1880	-.1890	
		.857			.0422				
		.865	-.2660						-.2250
		.920	-.2510			-.2310			
		.905			-.2860				
		.950			-.3370	-.2610	-.2450	-.2570	
		.953							
		.965	-.2310						
MACH ( 1 ) = 1.555	BETAT ( 5 ) = 7.060	Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
		.140	-.2170	-.1170	.2250	.5520	.4690	.4420	.4630
		.150				.0720	-.1150	-.1890	-.1720
		.161			.1780				
		.186		-.0580					
		.194	-.1220			.1420	.0280	.0710	-.1460
		.190			.1890				
		.177	-.1140						
		.229		.1060					
		.246				.1230	.0710	.1650	.1980
		.250							
		.362	.0590			-.1210	.0330		.0720
		.400			-.1210				
		.497	.1240			-.1610	-.1070		
		.550			-.1610				
		.600							-.1050
		.650	-.1320			-.1490		-.1050	
		.710				-.1710			
		.725						-.1250	-.1490
		.750			-.1680				
		.760				-.2110	-.2110		
		.775			-.2070				
		.818							
		.834	-.2260			-.2420	-.2410	-.2210	
		.850			.1440				
		.857							
		.865	-.2080			-.2650			-.2310
		.910	-.2260						
		.915			-.3130				
		.950				-.2980	-.2810	-.2830	
		.953			-.3620				

## TABULATED PRESSURE DATA - INCH

AMES 97-717 1A9 02A + S3 + T9 LOWER WING

(RBL 07)

**SECTION ( 1 ) LOUER WING**

**DEPENDENT VARIABLE CP**

$$\text{BETAT} ( 5 ) = 7.565$$

**MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.680**

3

55

94

1341 - (27) - 03640

6211

250

217

565

1991

659

- .158U

552

334

31.23 113

**85:**

11

1715

- .2781

0130  
0136

673 .781 .827

1998

17.65°	17.26°	17.53°	17.61°
--------	--------	--------	--------

1241

AMES 97-717 1A9 CEA + S3 + T9 LOWER WING

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.1000 BETAT ( 1 ) = -8.310

	Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW								
.150								
.177					.1290	.1160	.0860	.0820
.229	.1240		.1640					
.246		.1540						
.290					.1230	.1110	.1220	.1170
.362	.1170				.2110	.2870		.1690
.400				.2480				
.452								
.497	.0720				.2510	.1340		
.550				.2130				
.565								
.600								
.650								
.710	.2030				.1590	.1410	.1080	.1220
.725								
.790				.1310	.1160	.1210		
.760							.1250	.1020
.775				.1360				
.800								
.834	.0660				.1850	.1550	.1570	
.850				.1440				
.857								
.865	.0980				.1420			
.900	-.1410							
.905				-.1450				
.950								
.953				-.1480	-.0220		.1460	
.965	-.1220			-.1590				

MACH ( 2 ) = 2.1000 BETAT ( 2 ) = -6.260

	Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW								
.170								
.190		.1480	.1310	.4210	.9020	.8350	.8460	.8960
.191					.1790	-.1150	-.1430	-.1120
.196			.1120	.1530				
.194	.1670							
.190								
.177				.1320	.1970	.1740	.1480	.1440
.229	.1990							
.246		.1370						
.290					.1790	.1720	.1800	.1790
.362	.1110				.1610	.2320		.1280
.400				.1910				
.402								
.497	.1420							

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AKES 97-707 1A9 ORA + S3 + T9 LOWER MING

(RESOLUT)

SECTION ( 1 ) LOWER MING

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.260

Y/BW :  
X/CW :

.550	.427	.534	.673	.780	.887
.565	.1640	.1910	.0920		
.630				.0490	.0800
.650			.0940		
.700	.1540	.0600		-.0110	-.0460
.725					
.750					
.760		.0420	.0490	.0350	
.775		.0670			
.818					
.834	.0330		.0310	.0330	-.0460
.850		.0220			
.865	-.0400		-.0420		-.0820
.910	-.0240	-.0170	-.0420	-.0490	-.0480
.935					
.950		-.0850			
.953					
.965	-.0390				

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230

Y/BW :  
X/CW :

.040	.427	.534	.673	.780	.887
.050	.0830	.0270	.0770	.7770	.8180
.081		.0370	-.0300	-.0300	-.0410
.086	.0660	.1110			
.094					
.150	.0990		.0550	.0490	.0120
.177		.0920			
.229	.0670				
.246	.0940		.0420	.0390	.0320
.250					
.362	.0690		.0330	.0950	.0840
.410					
.412		.1490			
.497	.0290		.0980	.0680	
.550		.1160			
.565					.0150
.610				.0140	
.650	.0160				
.710			.0380		
.725		.0220			-.0410
.750					-.0340
.760		-.0740			
.775			-.0230	.0470	

(R00L577)

AVES 97-757 1A9 02A + S3 + T9 LOWER WING

SECTION ( 1 ) LOWER WING

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.230

DEPENDENT VARIABLE CP

Y/BW X/CW	.299	.364	.427	.534	.673	.785	.887
.808			-.0520				
.834	-.0100			-.0170	-.0470	-.0680	
.857		.0200					
.865	-.0630			-.0330			-.1090
.910	-.0310						
.915		-.0280		-.0660	-.0770	-.0640	
.950			-.0940				
.953							
.965	-.1540						

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.940

Y/BW X/CW	.299	.364	.427	.534	.673	.785	.887
.160	-.0860	-.0730	.1490	.4870	.4220	.4090	.4750
.190				-.0450	-.1300	-.1450	-.1520
.181			.0230				
.186		-.0510					
.194	-.0440			-.0360	-.0640	-.0890	-.1120
.191			.0120				
.177	-.0400						
.229		.0220					
.246				-.0380	-.0540	-.0680	-.0810
.290							
.362	-.0170			.0120	.0970		.0110
.410			-.0310				
.412							
.497	.0140			-.0680	-.0290		
.550			-.1030				
.565							
.610							
.650						-.0290	.0190
.710	-.1220			-.0970			
.725							
.790							
.760			-.1370			-.0650	-.0570
.775				-.1000	-.1190		
.818			-.1260				
.834	-.1310						
.850				-.1190	-.1160	-.1230	
.857			.0200				
.865	-.1240						
.910	-.1330			-.1480			-.1120
.915		-.1430					
.950				-.1150	-.1470	-.1540	
.953			-.1820				

(RBLU77)

TABULATED PRESSURE DATA - 1A98  
AMES 97-747 1A9 O2A + S3 + T9 LOWER WING

DATE 21 SEP 73

DEPENDENT VARIABLE CP

SECTION ( 1 ) LOWER WING

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.940

Y/BW  
X/CW

.965

MACH ( 2 ) = 2.000 BETAT ( 5 ) = 5.970

Y/BW  
X/CW

.299  
-.1920

.299  
-.1190

.364  
-.1090

.427  
.0920

.534  
-.0510

.673  
-.1330

.780  
-.1640

.887  
-.1560

.4220  
-.3940

.3660  
-.3940

.3660  
-.3940

.3660  
-.3940

.3660  
-.3940

.3660  
-.3940

.3660  
-.3940

.3660  
-.3940

.3660  
-.3940

.3660  
-.3940

.3660  
-.3940

.3660  
-.3940

.3660  
-.3940

.3660  
-.3940

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 8.010

Y/BW  
X/CW

.299  
-.1410

.364  
-.1340

.427  
-.1270

.534  
-.1630

.673  
-.1630

.780  
-.1740

.887  
-.1740

.4960  
-.4960

.4960  
-.4960

.4960  
-.4960

.4960  
-.4960

.4960  
-.4960

.4960  
-.4960

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-.4960

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-.4960

.4960  
-.4960

.4960  
-.4960

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

PAGE 712

ANES 97-707 1A9 02A + S3 + T9 LOWER WING

(R80L177)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CF

MACH ( 2 ) = 2.0000 BETAT ( 6 ) = 0.010

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.150							
.177							
.229							
.246							
.250							
.362							
.400							
.402							
.497							
.550							
.565							
.600							
.650							
.700							
.725							
.750							
.760							
.775							
.808							
.834							
.850							
.857							
.865							
.900							
.905							
.950							
.953							
.965							



DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

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AXES 97-707 1A9 02A + S3 + T9 LOWER WING

(R80L08) ( 24 MAY 73 )

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.0490 INCHES YMRP = .0000 INCHES  
 BREF = 39.0490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0310 SCALE

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500  
 RUDDER = .000 ELEVON = .000  
 RUFLR = .000

DEPENDENT VARIABLE CP

SECTION ( 1 ) LOWER WING

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.130

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.000	.0890	.1230	.4170	.8070	.7780	.7880	.8260
.050			.0690	-.0810	-.1710	-.1830	-.2310
.100		.0920					
.150	.0810			.1650	.1140	-.1140	-.1460
.200	.177		.1890				
.250	.0380	.1140			.0710	.0430	.0630
.300					.2240	.2880	.1160
.350	.2990		.2150				
.400				.2140	.1800		
.450			.2190				.1430
.500	.1790			.1280		.0930	
.550						-.0130	.0090
.600			.1630	-.1360	-.1710		
.650			-.0620				
.700	-.0120			-.1160	-.1100	-.1140	
.750			.1620				
.800							
.850	-.1390		.1620				
.900	-.2170			-.1810			-.1170
.950			-.2060				
.965			-.2760	-.2110	-.2050	-.1830	
.965	-.3380						

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.150

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.100	.0540	.0860	.3460	.7460	.7100	.7310	.7730
.150				-.1410	-.1770	-.2360	-.2580
.200		.0340					

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

ANES 97-707 1A9 OCA + S3 + T9 LOWER WING

(RBDLUS)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.150

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.150							
.177			.0230				
.229	.0300						
.246		.0570					
.250							
.362	.0070						
.400							
.402			.1460				
.497	.2450						
.550			.1200				
.565							
.610							
.650							
.700	.1680						
.725							
.750							
.760							
.775							
.800							
.834	-.1000						
.850							
.857							
.865	-.1570						
.900	-.2310						
.905							
.950							
.953							
.965	-.3500						

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -3.070

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.140							
.150	-.0360	.0340	.2630	.6120	.5950	.6280	.6800
.181				-.2010	-.2350	-.2920	-.3020
.186							
.194	-.0250						
.150							
.177							
.229	-.0040						
.246		.1670					
.250							
.362	-.0520						
.400							
.402							
.497	.1800						

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
ANES 97-707 IAS Q2A + S3 + T9 LOWER WING

(RECUR)

SECTION ( 1 ) LOWER WING  
DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.355 BETAT ( 3 ) = -3.670

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.550			.0090	.1370	.1260		.0670
.565						.0340	
.600							
.650	.0010						
.700							
.725							
.750							
.760							
.775							
.800							
.834							
.850							
.857							
.865							
.900							
.905							
.960							
.963							
.965							

MACH ( 1 ) = 1.355 BETAT ( 4 ) = 5.030

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.170			.1270	.4020	.5010	.5020	.5440
.180							
.181							
.186							
.194							
.190							
.177							
.229							
.246							
.250							
.362							
.400							
.402							
.497							
.550							
.565							
.600							
.650							
.700							
.725							
.750							
.760							
.775							



DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 LOWER WING

(RBDUSE)

SECTION ( 1 ) LOWER WING

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 7.050

DEPENDENT VARIABLE CP  
Y/BW .299 .364 .427 .534 .673 .780 .887  
X/CW .965 -.2580

MACH ( 1 ) = 1.555 BETAT ( 6 ) = 9.070

Y/BW .299 .364 .427 .534 .673 .780 .887  
X/CW .1630 -.10240 .1674 .3860 .3550 .3950 .3910  
.1600 -.1870 -.1460 -.2810 -.3040  
.181 -.1430  
.186 -.0720  
.194 -.0390  
.190  
.177  
.229 -.0840  
.246  
.250  
.362 -.0820  
.400  
.412  
.497  
.550  
.565  
.670  
.650  
.710  
.725  
.750  
.760  
.775  
.818  
.834  
.850  
.857  
.865  
.910  
.915  
.950  
.953  
.965

Y/BW .299 .364 .427 .534 .673 .780 .887  
X/CW .1630 -.10240 .1674 .3860 .3550 .3950 .3910  
.1600 -.1870 -.1460 -.2810 -.3040  
.181 -.1430  
.186 -.0720  
.194 -.0390  
.190  
.177  
.229 -.0840  
.246  
.250  
.362 -.0820  
.400  
.412  
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.550  
.565  
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.725  
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.818  
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.965

Y/BW .299 .364 .427 .534 .673 .780 .887  
X/CW .1630 -.10240 .1674 .3860 .3550 .3950 .3910  
.1600 -.1870 -.1460 -.2810 -.3040  
.181 -.1430  
.186 -.0720  
.194 -.0390  
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.229 -.0840  
.246  
.250  
.362 -.0820  
.400  
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.965

Y/BW .299 .364 .427 .534 .673 .780 .887  
X/CW .1630 -.10240 .1674 .3860 .3550 .3950 .3910  
.1600 -.1870 -.1460 -.2810 -.3040  
.181 -.1430  
.186 -.0720  
.194 -.0390  
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.229 -.0840  
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.362 -.0820  
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.760  
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.950  
.953  
.965

Y/BW .299 .364 .427 .534 .673 .780 .887  
X/CW .1630 -.10240 .1674 .3860 .3550 .3950 .3910  
.1600 -.1870 -.1460 -.2810 -.3040  
.181 -.1430  
.186 -.0720  
.194 -.0390  
.190  
.177  
.229 -.0840  
.246  
.250  
.362 -.0820  
.400  
.412  
.497  
.550  
.565  
.670  
.650  
.710  
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.750  
.760  
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.834  
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.857  
.865  
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.953  
.965

Y/BW .299 .364 .427 .534 .673 .780 .887  
X/CW .1630 -.10240 .1674 .3860 .3550 .3950 .3910  
.1600 -.1870 -.1460 -.2810 -.3040  
.181 -.1430  
.186 -.0720  
.194 -.0390  
.190  
.177  
.229 -.0840  
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.362 -.0820  
.400  
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.650  
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.965

Y/BW .299 .364 .427 .534 .673 .780 .887  
X/CW .1630 -.10240 .1674 .3860 .3550 .3950 .3910  
.1600 -.1870 -.1460 -.2810 -.3040  
.181 -.1430  
.186 -.0720  
.194 -.0390  
.190  
.177  
.229 -.0840  
.246  
.250  
.362 -.0820  
.400  
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.497  
.550  
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.650  
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.915  
.950  
.953  
.965

Y/BW .299 .364 .427 .534 .673 .780 .887  
X/CW .1630 -.10240 .1674 .3860 .3550 .3950 .3910  
.1600 -.1870 -.1460 -.2810 -.3040  
.181 -.1430  
.186 -.0720  
.194 -.0390  
.190  
.177  
.229 -.0840  
.246  
.250  
.362 -.0820  
.400  
.412  
.497  
.550  
.565  
.670  
.650  
.710  
.725  
.750  
.760  
.775  
.818  
.834  
.850  
.857  
.865  
.910  
.915  
.950  
.953  
.965

Y/BW .299 .364 .427 .534 .673 .780 .887  
X/CW .1630 -.10240 .1674 .3860 .3550 .3950 .3910  
.1600 -.1870 -.1460 -.2810 -.3040  
.181 -.1430  
.186 -.0720  
.194 -.0390  
.190  
.177  
.229 -.0840  
.246  
.250  
.362 -.0820  
.400  
.412  
.497  
.550  
.565  
.670  
.650  
.710  
.725  
.750  
.760  
.775  
.818  
.834  
.850  
.857  
.865  
.910  
.915  
.950  
.953  
.965

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.310

Y/BW .299 .364 .427 .534 .673 .780 .887  
X/CW .1630 -.10240 .1674 .3860 .3550 .3950 .3910  
.1600 -.1870 -.1460 -.2810 -.3040  
.181 -.1430  
.186 -.0720  
.194 -.0390  
.190  
.177  
.229 -.0840  
.246  
.250  
.362 -.0820  
.400  
.412  
.497  
.550  
.565  
.670  
.650  
.710  
.725  
.750  
.760  
.775  
.818  
.834  
.850  
.857  
.865  
.910  
.915  
.950  
.953  
.965

Y/BW .299 .364 .427 .534 .673 .780 .887  
X/CW .1630 -.10240 .1674 .3860 .3550 .3950 .3910  
.1600 -.1870 -.1460 -.2810 -.3040  
.181 -.1430  
.186 -.0720  
.194 -.0390  
.190  
.177  
.229 -.0840  
.246  
.250  
.362 -.0820  
.400  
.412  
.497  
.550  
.565  
.670  
.650  
.710  
.725  
.750  
.760  
.775  
.818  
.834  
.850  
.857  
.865  
.910  
.915  
.950  
.953  
.965





DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

(REBUL)

AMES 97-717 1A9 OEA + S3 + T9 LOWER WING

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.0000 BETAT ( 3 ) = -4.230

Y/BW X/CW	.299	.364	.427	.534	.673	.785	.887
.818			-.0630				
.834	-.0190						
.850				-.0570		-.1130	
.857							
.865	-.0710						
.900	-.0880			-.0660			-.1220
.915			-.0370				
.950				-.0880	-.1070	-.1160	
.953			-.0980				
.965	-.1570						

MACH ( 2 ) = 2.0000 BETAT ( 4 ) = 3.920

Y/BW X/CW	.299	.364	.427	.534	.673	.785	.887
.818							
.834	-.0640	-.0440	.1660	.4900	.4370	.4160	.4680
.850				-.1000	-.1860	-.1810	-.1810
.857			.0180				
.865	-.0290						
.900							
.915							
.950							
.953							
.965							
.818							
.834							
.850							
.857							
.865							
.900							
.915							
.950							
.953							
.965							
.818							
.834							
.850							
.857							
.865							
.900							
.915							
.950							
.953							
.965							
.818							
.834							
.850							
.857							
.865							
.900							
.915							
.950							
.953							
.965							





TABLED PRESSURE DATA - 1A9B

**TABULATED PRESSURE DATA - 1A9B1**

JAMES 97-757 1A5 02A + S3 + T9 LOWER WING

**10510025**

INVESTIGATION : 101133

**DEPENDENT VARIABLE CP**

$$\text{MACH}^4 (2) = 2.100 \cdot \text{DETAT} (5) = 8.5110$$

4

MD/

[illegible]

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TABULATED PRESSURE DATA - 1A9B

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AMES 97-717 1A9 OCA + S3 + T9 LOWER WING

(REPLACES 124 WING 73)

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = 0.0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = 0.0000 INCHES  
 SCALE = 0.0000 SCALE

## PARAMETRIC DATA

ALPHAT = -6.0000 OPRINC = -500  
 RUDDER = 0.0000 ELEVAT = -1000  
 RUDDLE = 0.0000

## SECTION ( 1 ) LOWER WING

MACH ( 1 ) = 1.555 BETAT ( 1 ) = -8.160

## DEPENDENT VARIABLE CP

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.1440	.1090	.1110	.3330	.7900	.7690	.7680	.8100
.1500			.0300	-.1400	-.2240	-.2590	-.2720
.1610							
.1660							
.1940	.1070						
.1900							
.1770			.0770	.1390	-.1660	-.1570	-.2050
.2200	.1640						
.2460		.1010					
.2500				.0540	.0200	-.1070	-.1580
.3620	.1030			.1930	.2390		-.1070
.4000			.1820				
.4120	.2900						
.4970			.1540	.1530	.1280		
.5500							
.5650							
.6000							
.6500						.0610	.0680
.7400	.1190				-.0260		
.7250				-.1000			
.7500							
.7600			-.1040			-.1040	-.1030
.7750				-.1670	-.1090		
.8000			-.1000				
.8340	-.0320						
.8500				-.1450	-.1420	-.1430	
.8570			.1440				
.8650	-.1530						
.9000	-.2330			-.1060			-.1020
.9050			-.2270				
.9500				-.2290	-.2230	-.2110	
.9530			-.2350				
.9650	-.3530						

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.1440	.1060	.0790	.3170	.6900	.6890	.7030	.7510
.1500				-.1000	-.2210	-.2050	-.2000
.1610							
.1660							
.1940							
.1900							
.1770							
.2200							
.2460							
.2500							
.3620							
.4000							
.4120							
.4970							
.5500							
.5650							
.6000							
.6500							
.7400	.1190						
.7250							
.7500							
.7600							
.7750							
.8000							
.8340	-.0320						
.8500							
.8570							
.8650	-.1530						
.9000	-.2330						
.9050							
.9500							
.9530							
.9650	-.3530						

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.170

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TABULATED PRESSURE DATA - 1A98

(RSL119)

AMES 97-717 1A9 02A + S3 + T9 LOWER WING

DEPENDENT VARIABLE CP

SECTION ( 1 ) LOWER WING

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.170

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.150							
.177			.0160				
.229	.0190						
.246		.0370					
.250				.0120	-.1200	-.1910	-.2420
.362	-.1240						
.400				.1300	.1800		-.1360
.402			.1290				
.497	.2230			.1200	.1930		
.550			.0550				
.565							-.1340
.600						.0320	
.700	.0550			-.0520	-.1400		
.725							-.1380
.750			-.0500				
.760				-.1110	-.1340		
.775							
.800							
.834	-.0710						
.850				-.1800	-.1730	-.1630	
.857			.0440				
.865	-.1660						-.1380
.900	-.2490			-.2160			
.905							
.950			-.2500	-.2510	-.2370	-.2330	
.953							
.965	-.3640		-.3140				

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.180

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.140							
.150							
.181							
.186		-.0190					
.194	.0440						
.150							
.177							
.229	-.0470		-.0350				
.246		.0460					
.250							
.362	-.0530			-.1400	-.1800	-.2330	-.2760
.400							
.402							
.497	.1950		.0840				
							-.1760

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TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 Q2A + S3 + T9 LOWER WING

(RBOL19)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.180

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.550							
.565							
.620							
.650							
.750	.0080						
.725							
.750							
.760							
.775							
.808							
.834							
.850							
.857							
.865							
.900							
.915							
.930							
.953							
.965							

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 3.640

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.100							
.150							
.181							
.186							
.194							
.190							
.177							
.220							
.246							
.250							
.362							
.400							
.402							
.497							
.550							
.565							
.600							
.650							
.700							
.725							
.750							
.760							
.775							

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TABULATED PRESSURE DATA - 1A9B

AMES 97-707 1A9 CEA + S3 + T9 LOWER WING

(RBL59)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 3.640

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.818			-.2540				
.834	-.1690			-.2520	-.2475	-.2100	
.850			.1444				
.857	-.2675			-.2890			-.2220
.865	-.2650						
.900			-.2910				
.915				-.3240	-.3140	-.2780	
.950			-.3380				
.953	-.2430						
.965							

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 5.690

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.144	-.1520	-.10370	.1060	.4770	.4010	.4460	.4610
.150				-.3020	-.3180	-.2940	-.3510
.181			-.1170				
.186	-.1070	-.1000					
.194				-.1110	-.2140	-.2050	-.3140
.190			-.1470				
.177	-.1030						
.229		-.1770					
.246				-.1530	.1430	-.1740	-.2150
.250				.1290	.1090		-.1450
.362	-.1110						
.410			-.1140				
.402	-.1060			-.1170	-.1400		
.497			-.1020				-.1870
.550							
.565							
.640							
.650	-.1060					-.1320	
.710				-.1470	-.1740		
.725						-.2010	-.1930
.750							
.760			-.1480				
.775				-.2140	-.2160		
.818			-.2030				
.834	-.2140						
.850				-.2580	-.2520	-.2600	
.857			.1444				
.865	-.2890						-.2690
.900	-.2530			-.2050			
.915			-.3340				
.950				-.3190	-.3150	-.3140	
.953			-.3840				

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JAMES 97-757 1A9 Q2A + S3 + T9 LOWER WING

### SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

$$\beta(1) = 1.555 \quad \beta(5) = 5.694$$

PB/A	.699	.364	.174	.000
PD/X				
PE/S	-.2430	.965		

$$\text{BETAT (6)} = 7.74$$

	Y/BJ	X/CW	Y/BJ	X/CW	Y/BJ	X/CW
1	.299	-.304	.427	-.421	.338	-.338
2	.140	-.181	.131	-.012	.358	-.421
3	.055	-.041	.041	-.041	-.274	-.322
4					-.254	-.405

$$\text{BETAT ( 1 )} = -8.340$$

Y/BW	.299	.364	.427	.532	.675	
X/CW	.1481	.1694	.4271	.9241	.8451	.9451
.142				-.1142	-.1157	-.1641
.143			.1311			
.166		.1181				
.194	.1481					

AMES 97-7J7 1A9 CGA + S3 + T9 LOWER WING

(RECU19)

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.340

	Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW								
.190					.0540	.0210	-.0090	-.0200
.177				.1100				
.229		.1010						
.246			.1460					
.290					.0530	.0320	.0170	.0110
.362		.1200			.1940	.2220		.1510
.410								
.412				.2190				
.497		.0370			.1970	.1010		
.550				.1630				
.565								
.610								
.650								
.710		.1510			.0680	.0870		-.0140
.725								
.750				.0480				
.760					.0510	.0290		
.775				.0420				
.810								
.834		.0940			-.0470	.0190	-.0110	
.850								
.857				.0440				
.865		-.0100			-.0470			-.0890
.910		.0470		-.0450				
.915					-.0510	-.0710	-.0440	
.950				-.0770				
.953								
.965		-.1310						

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.310

	Y/BW	.299	.364	.427	.534	.673	.780	.887
X/CW								
.140					.0430	.0190	.0170	.0790
.150					-.0420	-.0130	-.0880	-.0430
.181				.0950				
.186			.0730					
.194		.0950			.0380	-.0130	-.0360	-.0530
.190								
.177				.0880				
.229		.0780						
.246			.1230					
.290					.0330	-.0450	-.0160	-.0240
.362		.0910			.1680	.0130		.0120
.410								
.412				.1800				
.497		.0210						



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AMES 97-757 1A9 02A + S3 + T9 LOWER WING

(RBL59)

SECTION ( 1 ) LOWER WING

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -6.300

DEPENDENT VARIABLE CP

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.590			.1300	.1380	.0680		-.0330
.565						.0240	
.600					.0570		
.650	.1070			.0330		-.0350	-.0560
.700			.0210	-.0430	.0480		
.725			-.0400				
.750							
.775							
.800	.0190			-.0460	-.0250	-.0630	
.825			.0220				
.850							
.875	-.0420			-.0460			-.1110
.900	-.0290		-.0130				
.925			-.0860				
.950							
.975	-.1420						

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.250

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.590	-.0160	.0830	.3570	.7170	.6830	.7480	.7970
.565			.0640	-.0450	-.0990	-.1100	-.1170
.600							
.650	.0650	.0510		.0110	-.0380	-.0630	-.0800
.700			.0500				
.725				.0110	-.0270	-.0400	-.0520
.750	.0630			.0100	.0830		-.0100
.775		.0390					
.800				.0530	.0380		
.825	.0560		.0780				-.0300
.850							
.875						-.0400	
.900	.0450			-.0420			-.0400
.925			-.0840				
.950				-.0400			
.975							

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TABULATED PRESSURE DATA - 1A98

AMES 97-7J7 1A9 O2A + S3 + T9 LOWER WING (REBOLLO)

## SECTION ( 1 ) LOWER WING DEPENDENT VARIABLE CF

MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.250

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.808			-.1690				
.834	-.1290						
.850				-.1890	-.1750	-.1120	
.857			.1440				
.865	-.1710			-.1880			-.1310
.940	-.1160						
.945			-.1610	-.1980	-.1220	-.1130	
.950							
.953			-.1590				
.965	-.1610						

MACH ( 2 ) = 2.000 BETAT ( 4 ) = 3.930

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.1440	-.1260	-.1170	.1810	.4940	.4420	.4100	.4530
.1500				-.1160	-.1860	-.2120	-.2480
.1810			.1160				
.1860		.1450					
.1940	-.1140						
.1950				-.1680	-.1520	-.1710	-.1820
.1770			-.1460				
.2290	.1410						
.2460		.1360					
.2500				-.1800	-.1150	-.1450	-.1590
.3620	-.1420			-.1230	.1240		-.1490
.4140			-.1300				
.4120							
.4970	-.1250			-.1070	-.1790		
.5500			-.1150				-.1310
.5650							
.6140						-.1110	
.6500							
.7140	-.1230			-.1330	-.1410		
.7250							
.7500			-.1580			-.1460	-.1420
.7600							
.7750			-.1760	-.1590	-.1740		
.8100							
.8340	-.1740						
.8500			.1440	-.1920	-.1890	-.1840	
.8570							
.8650	-.1590			-.1910			-.1870
.9400	-.1810						
.9450			-.1730				
.9500				-.1930	-.2090	-.2180	
.9530			-.2020				





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TABULATED PRESSURE DATA - 1A98

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AMES 97-707 IAS Q2A + S3 + T9 LOWER WING

(880.15)

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.210

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.150							
.177							
.229	.0150						
.246		.0310					
.250							
.362	-.0280						
.400							
.412			.1140				
.497	.2210						
.550							
.565			.0610				
.600							
.650							
.710	.0500						
.725							
.750							
.760							
.775							
.808							
.834	-.0820						
.850							
.857							
.865	-.1760						
.900	-.2550						
.915							
.950							
.953							
.965	-.3690						

MACH ( 1 ) = 1.555 BETAT ( 3 ) = -4.220

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.150							
.177							
.229	.0340						
.246		.0420					
.250							
.362							
.400							
.412							
.497	.0330						
.550							
.565							
.600							
.650							
.710	-.0140						
.725							
.750							
.760							
.775							
.808							
.834	-.0820						
.850							
.857							
.865	-.1760						
.900	-.2550						
.915							
.950							
.953							
.965	-.3690						



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TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 Q2A + S3 + T9 LOWER WING

(RBD110)

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 4 ) = 3.650

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.808			-.2670				
.834	-.1940						
.850				-.3070	-.2580	-.2220	
.857			.0000				
.865	-.2790			-.2980			-.2320
.900	-.2990		-.3380				
.905				-.3220	-.3260	-.2940	
.920			-.2710				
.953							
.965	-.2440						

MACH ( 3 ) = 1.555 BETAT ( 5 ) = 5.710

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.000			.0670	.3230	.3620	.3120	.3880
.050	-.1350	-.0270		-.3610	-.3780	-.3430	-.2720
.081			-.1550				
.086		-.0910					
.094				-.1120	-.3480	-.3210	-.2680
.150			-.0670				
.177							
.229	-.1080						
.246		-.0790					
.290				-.0520	-.2280	-.2710	-.2740
.362	-.1080			-.1010	.1080		-.2430
.400			-.1310				
.402							
.497	-.0230			-.0790	-.1010		
.550			-.0330				-.2420
.565							
.600						-.1510	
.650							
.700	-.1520			-.1480			
.725					-.2180		
.750						-.2250	-.2470
.760			-.1610				
.775			-.2140	-.1990	-.2540		
.808							
.834	-.1920			-.2720	-.2770	-.3000	
.850			.1440				
.857							-.2710
.865	-.2810			-.3040			
.900	-.3000		-.3410				
.905				-.3320	-.3240	-.3350	
.920			-.3890				
.953							
.955							





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TABULATED PRESSURE DATA - 1A98  
AMES 97-707 1A9 021 + S3 + T5 LOWER WING

RESULTS

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP  
MACH ( 2 ) = 2.000 BETAT ( 1 ) = -9.390

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.150				.1250	-.1029	-.1551	-.1689
.177			.1840				
.229	.1340						
.246		.1470		.1380	-.1310	-.1211	-.1088
.250							
.352	.1180			.1860	.1350		-.1050
.400			.2010				
.402							
.497	.0460		.1540	.1750	.1090		
.550							-.1040
.565							
.600				.1540		.1070	
.700	.1480				.1840		
.725						-.1020	-.1070
.750			.1370	.1080	.1550		
.760							
.775		.1130					
.800	.1450			-.1020	.1620	-.1010	
.834							
.850			.1220				
.857				-.1070			-.1050
.965	-.1010						
.900	-.1010			-.1060	-.1030	-.1010	
.950							
.953							
.965	-.1030						
Y/BW X/CW	.299	.354	.427	.534	.673	.780	.887
.100				.1740			
.109							
.101							
.106		.1090					
.104							
.110							
.177			.1660				
.229	.1780						
.246		.1220					
.250							
.362	.1020						
.400							
.402							
.497							
.550							
.565							
.600							
.700							
.725							
.750							
.760							
.775							
.800							
.834							
.850							
.857							
.965							

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -6.330

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98  
ANES 97-707 1A9 ORA + S3 + T9 LOWER WING

(R90.110)

SECTION 1) LOWER WING

MACH (2) = 2.000 BETAT (2) = -6.330

DEPENDENT VARIABLE CP

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.550							
.565			.1110	.1230	.0650		
.600						-.0710	
.650					.0490		
.700	.0960		.0210			-.0430	-.1070
.750							
.760			.0110				
.775			-.0380		-.0120	-.0030	
.800							
.834	.0480				-.0650	-.0320	-.0510
.850			.0440				
.857							
.865	-.0540						
.900	-.1160		-.0430		-.1060	-.1140	-.0880
.905							
.950			-.0880				
.953							
.975	-.1470						

MACH (2) = 2.000 BETAT (3) = -4.280

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.040							
.050			.3640	.7130	.6650	.6740	.7420
.081	-.0110	.1030		-.0970	-.1450	-.1930	-.1450
.086			.0450				
.094	.0660						
.150					-.0310	-.0850	-.1110
.177			.0230				
.225	.0840						
.246		.1030					
.290					-.0280	-.0670	-.0760
.362	.0820				.0860	.1250	-.0640
.400			.1160				
.402							
.497	.0490				.0420	.0490	
.550			.0590				
.553							
.600							
.650	.0350					-.0320	
.700					-.0130		
.725							
.750					-.0130		-.0200
.760							
.775			-.0350		-.0510	-.0360	

DATE 21 SEP 73  
 TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 02A + S3 + T9 LOWER WING

(R20L10)

SECTION ( 1 ) LOWER WING		DEPENDENT VARIABLE CP									
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.280		Y/BW	.299	.364	.427	.534	.673	.780	.887		
		X/CW									
		.808									
		.834	-.0900								
		.850									
		.857									
		.865	-.0830								
		.900	-.1310								
		.905									
		.950									
		.953									
		.965	-.1750								
		Y/BW	.299	.364	.427	.534	.673	.780	.887		
		X/CW									
		.140									
		.150									
		.181									
		.196									
		.194									
		.150									
		.177									
		.229									
		.246									
		.250									
		.362									
		.410									
		.412									
		.497									
		.550									
		.565									
		.600									
		.650									
		.700									
		.725									
		.750									
		.760									
		.775									
		.808									
		.834	-.1370								
		.850									
		.857									
		.865	-.1590								
		.900	-.1750								
		.905									
		.950									
		.953									
		.955									
		Y/BW	.299	.364	.427	.534	.673	.780	.887		
		X/CW									
		.140									
		.150									
		.181									
		.196									
		.194									
		.150									
		.177									
		.229									
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		.725									
		.750									
		.760									
		.775									
		.808									
		.834	-.1370								
		.850									
		.857									
		.865	-.1590								
		.900	-.1750								
		.905									
		.950									
		.953									
		.955									

MACH ( 2 ) = 2.000 BETAT ( 4 ) = -.170



AMES 97-707 1A9 02A ♦ S3 ♦ T9 LOWER WING

DEPENDENT VARIABLE CP

**SECTION (1) LOWER WING**

$$\text{WACH} (2) = 2,000 \text{ BETAT} (6) = 5.980$$

Y/BM	.299	.364	.427	.534	.675	.780	.887
X/CM				-.0420	-.1959	-.2150	-.2240

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.229    -.0040

.246 .0163

.250	- .0986J	- .1430	- .1770	- .2110
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.362	-.0160		
.0171		-.0433	-.0193
			-.2180

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.497      -.0200

1955 -1.120 -1.130

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2
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0.000	-0.1795
0.750	-0.1540

	.725	- .1720
		- .1720 = - .1892

750  
1983-1984

.760	-.1732	-.1760	-.2360
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1991-1992

.834    -.1560

058°

Year	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100																															
Population	1,000,000	1,050,000	1,100,000	1,150,000	1,200,000	1,250,000	1,300,000	1,350,000	1,400,000	1,450,000	1,500,000	1,550,000	1,600,000	1,650,000	1,700,000	1,750,000	1,800,000	1,850,000	1,900,000	1,950,000	2,000,000	2,050,000	2,100,000	2,150,000	2,200,000	2,250,000	2,300,000	2,350,000	2,400,000	2,450,000	2,500,000	2,550,000	2,600,000	2,650,000	2,700,000	2,750,000	2,800,000	2,850,000	2,900,000	2,950,000	3,000,000	3,050,000	3,100,000	3,150,000	3,200,000	3,250,000	3,300,000	3,350,000	3,400,000	3,450,000	3,500,000	3,550,000	3,600,000	3,650,000	3,700,000	3,750,000	3,800,000	3,850,000	3,900,000	3,950,000	4,000,000	4,050,000	4,100,000	4,150,000	4,200,000	4,250,000	4,300,000	4,350,000	4,400,000	4,450,000	4,500,000	4,550,000	4,600,000	4,650,000	4,700,000	4,750,000	4,800,000	4,850,000	4,900,000	4,950,000	5,000,000	5,050,000	5,100,000	5,150,000	5,200,000	5,250,000	5,300,000	5,350,000	5,400,000	5,450,000	5,500,000	5,550,000	5,600,000	5,650,000	5,700,000	5,750,000	5,800,000	5,850,000	5,900,000	5,950,000	6,000,000	6,050,000	6,100,000	6,150,000	6,200,000	6,250,000	6,300,000	6,350,000	6,400,000	6,450,000	6,500,000	6,550,000	6,600,000	6,650,000	6,700,000	6,750,000	6,800,000	6,850,000	6,900,000	6,950,000	7,000,000	7,050,000	7,100,000	7,150,000	7,200,000	7,250,000	7,300,000	7,350,000	7,400,000	7,450,000	7,500,000	7,550,000	7,600,000	7,650,000	7,700,000	7,750,000	7,800,000	7,850,000	7,900,000	7,950,000	8,000,000	8,050,000	8,100,000	8,150,000	8,200,000	8,250,000	8,300,000	8,350,000	8,400,000	8,450,000	8,500,000	8,550,000	8,600,000	8,650,000	8,700,000	8,750,000	8,800,000	8,850,000	8,900,000	8,950,000	9,000,000	9,050,000	9,100,000	9,150,000	9,200,000	9,250,000	9,300,000	9,350,000	9,400,000	9,450,000	9,500,000	9,550,000	9,600,000	9,650,000	9,70

0.865	-0.1673	-0.2112
0.971	-0.2110	-0.2112

9.5  
- .1810

.95j  
-.226j -.236j -.248j

-.953  
-.2191

596 - 0527

Y/B4	.299	.364	.427	.534	.673	.783	.887
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NOX

1.11	-0.750	.1543	.3693	.3223	.2733	.3923
------	--------	-------	-------	-------	-------	-------

$\frac{0.95}{-1.38} = -0.69$

1967  
1966  
-0173  
-0133

.006  
.094 - .0180

.159  
-.1916    -.2175    -.2229    -.2321

177  
- .0450

622' -0.0390

.246	.0070	-.1070	-.1150	-.1930	-.2110
------	-------	--------	--------	--------	--------

.362 -.0240

07.0° - 07.2° - 07.5° - 07.8° - 08.1° - 08.4° - 08.7° - 09.0° - 09.3° - 09.6° - 09.9° - 10.2° - 10.5° - 10.8° - 11.1° - 11.4° - 11.7° - 12.0° - 12.3° - 12.6° - 12.9° - 13.2° - 13.5° - 13.8° - 14.1° - 14.4° - 14.7° - 15.0° - 15.3° - 15.6° - 15.9° - 16.2° - 16.5° - 16.8° - 17.1° - 17.4° - 17.7° - 18.0° - 18.3° - 18.6° - 18.9° - 19.2° - 19.5° - 19.8° - 20.1° - 20.4° - 20.7° - 21.0° - 21.3° - 21.6° - 21.9° - 22.2° - 22.5° - 22.8° - 23.1° - 23.4° - 23.7° - 24.0° - 24.3° - 24.6° - 24.9° - 25.2° - 25.5° - 25.8° - 26.1° - 26.4° - 26.7° - 27.0° - 27.3° - 27.6° - 27.9° - 28.2° - 28.5° - 28.8° - 29.1° - 29.4° - 29.7° - 30.0° - 30.3° - 30.6° - 30.9° - 31.2° - 31.5° - 31.8° - 32.1° - 32.4° - 32.7° - 33.0° - 33.3° - 33.6° - 33.9° - 34.2° - 34.5° - 34.8° - 35.1° - 35.4° - 35.7° - 36.0° - 36.3° - 36.6° - 36.9° - 37.2° - 37.5° - 37.8° - 38.1° - 38.4° - 38.7° - 39.0° - 39.3° - 39.6° - 39.9° - 40.2° - 40.5° - 40.8° - 41.1° - 41.4° - 41.7° - 42.0° - 42.3° - 42.6° - 42.9° - 43.2° - 43.5° - 43.8° - 44.1° - 44.4° - 44.7° - 45.0° - 45.3° - 45.6° - 45.9° - 46.2° - 46.5° - 46.8° - 47.1° - 47.4° - 47.7° - 48.0° - 48.3° - 48.6° - 48.9° - 49.2° - 49.5° - 49.8° - 50.1° - 50.4° - 50.7° - 51.0° - 51.3° - 51.6° - 51.9° - 52.2° - 52.5° - 52.8° - 53.1° - 53.4° - 53.7° - 54.0° - 54.3° - 54.6° - 54.9° - 55.2° - 55.5° - 55.8° - 56.1° - 56.4° - 56.7° - 57.0° - 57.3° - 57.6° - 57.9° - 58.2° - 58.5° - 58.8° - 59.1° - 59.4° - 59.7° - 60.0° - 60.3° - 60.6° - 60.9° - 61.2° - 61.5° - 61.8° - 62.1° - 62.4° - 62.7° - 63.0° - 63.3° - 63.6° - 63.9° - 64.2° - 64.5° - 64.8° - 65.1° - 65.4° - 65.7° - 66.0° - 66.3° - 66.6° - 66.9° - 67.2° - 67.5° - 67.8° - 68.1° - 68.4° - 68.7° - 69.0° - 69.3° - 69.6° - 69.9° - 70.2° - 70.5° - 70.8° - 71.1° - 71.4° - 71.7° - 72.0° - 72.3° - 72.6° - 72.9° - 73.2° - 73.5° - 73.8° - 74.1° - 74.4° - 74.7° - 75.0° - 75.3° - 75.6° - 75.9° - 76.2° - 76.5° - 76.8° - 77.1° - 77.4° - 77.7° - 78.0° - 78.3° - 78.6° - 78.9° - 79.2° - 79.5° - 79.8° - 80.1° - 80.4° - 80.7° - 81.0° - 81.3° - 81.6° - 81.9° - 82.2° - 82.5° - 82.8° - 83.1° - 83.4° - 83.7° - 84.0° - 84.3° - 84.6° - 84.9° - 85.2° - 85.5° - 85.8° - 86.1° - 86.4° - 86.7° - 87.0° - 87.3° - 87.6° - 87.9° - 88.2° - 88.5° - 88.8° - 89.1° - 89.4° - 89.7° - 90.0° - 90.3° - 90.6° - 90.9° - 91.2° - 91.5° - 91.8° - 92.1° - 92.4° - 92.7° - 93.0° - 93.3° - 93.6° - 93.9° - 94.2° - 94.5° - 94.8° - 95.1° - 95.4° - 95.7° - 96.0° - 96.3° - 96.6° - 96.9° - 97.2° - 97.5° - 97.8° - 98.1° - 98.4° - 98.7° - 99.0° - 99.3° - 99.6° - 99.9° - 100.2° - 100.5° - 100.8° - 101.1° - 101.4° - 101.7° - 102.0° - 102.3° - 102.6° - 102.9° - 103.2° - 103.5° - 103.8° - 104.1° - 104.4° - 104.7° - 105.0° - 105.3° - 105.6° - 105.9° - 106.2° - 106.5° - 106.8° - 107.1° - 107.4° - 107.7° - 108.0° - 108.3° - 108.6° - 108.9° - 109.2° - 109.5° - 109.8° - 110.1° - 110.4° - 110.7° - 111.0° - 111.3° - 111.6° - 111.9° - 112.2° - 112.5° - 112.8° - 113.1° - 113.4° - 113.7° - 114.0° - 114.3° - 114.6° - 114.9° - 115.2° - 115.5° - 115.8° - 116.1° - 116.4° - 116.7° - 117.0° - 117.3° - 117.6° - 117.9° - 118.2° - 118.5° - 118.8° - 119.1° - 119.4° - 119.7° - 120.0° - 120.3° - 120.6° - 120.9° - 121.2° - 121.5° - 121.8° - 122.1° - 122.4° - 122.7° - 123.0° - 123.3° - 123.6° - 123.9° - 124.2° - 124.5° - 124.8° - 125.1° - 125.4° - 125.7° - 126.0° - 126.3° - 126.6° - 126.9° - 127.2° - 127.5° - 127.8° - 128.1° - 128.4° - 128.7° - 129.0° - 129.3° - 129.6° - 129.9° - 130.2° - 130.5° - 130.8° - 131.1° - 131.4° - 131.7° - 132.0° - 132.3° - 132.6° - 132.9° - 133.2° - 133.5° - 133.8° - 134.1° - 134.4° - 134.7° - 135.0° - 135.3° - 135.6° - 135.9° - 136.2° - 136.5° - 136.8° - 137.1° - 137.4° - 137.7° - 138.0° - 138.3° - 138.6° - 138.9° - 139.2° - 139.5° - 139.8° - 140.1° - 140.4° - 140.7° - 141.0° - 141.3° - 141.6° - 141.9° - 142.2° - 142.5° - 142.8° - 143.1° - 143.4° - 143.7° - 144.0° - 144.3° - 144.6° - 144.9° - 145.2° - 145.5° - 145.8° - 146.1° - 146.4° - 146.7° - 147.0° - 147.3° - 147.6° - 147.9° - 148.2° - 148.5° - 148.8° - 149.1° - 149.4° - 149.7° - 150.0° - 150.3° - 150.6° - 150.9° - 151.2° - 151.5° - 151.8° - 152.1° - 152.4° - 152.7° - 153.0° - 153.3° - 153.6° - 153.9° - 154.2° - 154.5° - 154.8° - 155.1° - 155.4° - 155.7° - 156.0° - 156.3° - 156.6° - 156.9° - 157.2° - 157.5° - 157.8° - 158.1° - 158.4° - 158.7° - 159.0° - 159.3° - 159.6° - 159.9° - 160.2° - 160.5° - 160.8° - 161.1° - 161.4° - 161.7° - 162.0° - 162.3° - 162.6° - 162.9° - 163.2° - 163.5° - 163.8° - 164.1° - 164.4° - 164.7° - 165.0° - 165.3° - 165.6° - 165.9° - 166.2° - 166.5° - 166.8° - 167.1° - 167.4° - 167.7° - 168.0° - 168.3° - 168.6° - 168.9° - 169.2° - 169.5° - 169.8° - 170.1° - 170.4° - 170.7° - 171.0° - 171.3° - 171.6° - 171.9

219° - 02803° -

169. -1020

(RBO15)

SECTION ( 1 ) LOWER WING

**DEPENDENT VARIABLE CP**

MACM ( 2 ) = 2.000 BETAT ( 7 ) = 8.055

78W	.299	.364	.427	.334	.675
X/OW					
.55U			-.173U	-.155U	-.140U
.565					
.60U					
.65U					-.136U
.70U	-.119U			-.194U	-.250U
.725			-.181U		-.179U
.75U			-.175U	-.148U	-.221U
.76U					
.775					
.808	-.203U			-.192U	-.223U
.834					
.85U			.020U		
.857					
.865	-.233U			-.212U	
.9U	-.233U		-.216U	-.224U	-.249U
.9U5					
.95U			-.251U	-.224U	-.215U
.953					
.965	-.226U				

DATE 21 SEP 73

TABULATED PRESSURE DATA - 1A98

PAGE 743

AMES 97-707 1A9 02A + S3 + T9 LOWER WING

(RBOL11) ( 24 MAY 73 )

## REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES  
 LREF = 39.8490 INCHES YMRP = .0000 INCHES  
 BREF = 39.8490 INCHES ZMRP = .0000 INCHES  
 SCALE = .0300 SCALE

## PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .500  
 RUDDER = -15.000 ELEVON = .000  
 RUFLR = .000

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555	BETAT ( 1 ) = -8.420	Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
		.000	.0930	.0670	.3580	.7560	.7560	.7460	.7230
		.081			.0080	-.1930	-.2760	-.3110	-.3160
		.096	.0550	.0530					
		.094							
		.150							
		.177			.1410				
		.229	.0640						
		.246		.0710					
		.250	.0290			.0390	-.0090	-.1800	-.2120
		.362				.1790	.1830		-.1680
		.410		.1800					
		.412							
		.497	.2940			.1370	.1270		
		.580		.1630					
		.565							
		.600						.0380	.0730
		.650							
		.700	.1220			-.0240			
		.725				-.0170		-.0390	-.0260
		.750							
		.760				-.0410			
		.775				-.1080	-.1160		
		.808							
		.834	-.0520						
		.850				-.1670	-.1550	-.1400	
		.857							
		.865	-.1540						
		.900	-.2410						
		.905				-.2090			-.1330
		.950				-.2370			
		.953				-.2410	-.2270	-.2070	
		.965	-.3580			-.2990			
MACH ( 1 ) = 1.555	BETAT ( 2 ) = -6.360	Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
		.000	.0640	.0730	.2920	.6860	.6660	.6690	.6420
		.050				-.2430	-.2760	-.3440	-.3450
		.081							
		.086		.0110					
		.094							

TABULATED PRESSURE DATA - 1A9B

DATE 21 SEP 73

AMES 97-707 1A9 O2A + S3 + T9 LOWER WING

(RBOL11)

DEPENDENT VARIABLE CP

SECTION ( 1 ) LOWER WING

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -6.360

Y/BW	X/CW	.299	.364	.427	.534	.673	.780	.887
.150				-.0120	-.1240	-.2110	-.2500	-.3000
.177								
.229		.0150	.0320		-.1010	-.0550	-.2160	-.2490
.246								
.250					.1250	.0450		-.2190
.362		-.0270						
.400				.1170				
.402					.1010	.0960		
.497		.2290		.0900				-.1260
.530						-.0550	.0230	
.565					-.1680			-.0560
.600		.0600						
.700				-.1070	-.1270	-.1290		
.725				-.1460				
.750					-.2180	-.1810	-.1720	
.760								
.775								
.808								
.834		-.0700						
.850				.0200				-.1510
.857					-.2320			
.865		-.1750						
.900		-.2580		-.2540	-.2670	-.2570	-.2340	
.905								
.950				-.3180				
.953								
.965		-.3710						
Y/BW		.299	.364	.427	.534	.673	.780	.887
X/CW		.0390	.0490	.2300	-.2970	-.3480	-.3810	-.3730
.150				-.0720				
.181			-.0240					
.186					-.1150	-.3000	-.2980	-.3390
.194		.0370						
.190				-.1650				
.177								
.229		-.0130	.0100					
.246					-.1460	-.1230	-.2600	-.2880
.250								
.362		-.0550			.0810	-.1040		-.2500
.400				.0700				
.402								
.497		.1940						

MACH ( 1 ) = 1.555 BETAT ( 2 ) = -4.310



DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98 (RBOL11)

AMES 97-757 1A9 ORA + S3 + T9 LOWER WING

SECTION ( 1 ) LOWER WING		DEPENDENT VARIABLE CP			
MACH ( 1 ) = 1.555	BETAT ( 3 ) = -4.310	Y/BW	.299	.364	.427
		X/CW	.534	.673	.780
.550					.887
.565					
.610					
.650					
.700					
.725					
.750					
.760					
.775					
.808					
.834					
.850					
.857					
.865					
.900					
.915					
.950					
.953					
.965					
MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.180					
Y/BW	.299	.364	.427	.534	.673
X/CW	.00300	.00460	.01300	.04830	.4290
.100					
.101					
.106					
.109					
.150					
.177					
.229					
.246					
.250					
.362					
.410					
.412					
.497					
.550					
.565					
.610					
.650					
.700					
.725					
.750					
.760					
.775					

AMES 97-707 1A9 08A + S3 + T9 LOWER WING

(RBOL11)

## SECTION ( 1 ) LOWER WING

## DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 4 ) = -.180

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.808			-.2340				
.834	-.1900						
.850				-.2840	-.2750	-.2950	
.857			.1000				
.865	-.2470						
.900	-.3160			-.3180			-.2360
.905			-.3280				
.930				-.3480	-.3330	-.3160	
.933			-.3790				
.955	-.3700						

MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.808							
.834	-.1010	-.1620	.1750	.3720	.3210	.3440	.3390
.850				-.3670	-.4160	-.4150	-.4490
.857			-.1450				
.865		-.1080					
.900				-.2070	-.3990	-.3420	-.3990
.905			-.1170				
.930		-.1040					
.933							
.955		-.1680					
.246							
.250				-.1750	-.2250	-.2380	-.3080
.362	-.1910			-.1190	-.1380		-.2880
.402			-.1390				
.497	.1150			-.1640	-.1910		
.550		-.1660					-.1260
.565							
.600							
.650							
.700	-.2050						
.725				-.2230			
.750					-.1590		
.760			-.2440			-.1740	-.1560
.775				-.2490	-.2180		
.800			-.2850				
.834	-.2060						
.850			.1000				
.857				-.2690	-.2670	-.2510	
.865	-.2850						
.900	-.2800			-.3140			-.2440
.905			-.3340				
.930				-.3380	-.3360	-.3170	
.933			-.2500				

DATE 21 SEP 73 TABULATED PRESSURE DATA - 1A98

AVES 97-707 1A9 02A + S3 + T9 LOWER WING

(RBDL11)

SECTION ( 1 ) LOWER WING		DEPENDENT VARIABLE CP									
MACH ( 1 ) = 1.555 BETAT ( 5 ) = 3.940		Y/BW	X/CW	.299	.364	.427	.534	.673	.785	.887	
		.965		-.2480							
MACH ( 1 ) = 1.555 BETAT ( 6 ) = 6.000		Y/BW	X/CW	.299	.364	.427	.534	.673	.785	.887	
		.000		-.1470	-.0310	.0620	.4010	.3470	.2960	.3030	
		.090					-.3690	-.3670	-.2950	-.3030	
		.081				-.1620					
		.086		-.0940							
		.094		-.0710			-.0290	-.3590	-.3020	-.2950	
		.150				-.0160					
		.177		-.0930							
		.229		-.0660			-.0760	-.1470	-.2760	-.2890	
		.246									
		.250		-.1150			-.0430	.0190		-.2410	
		.362				-.1480					
		.400									
		.412									
		.497		-.0390			-.0950	-.1050			
		.550				-.0330					
		.565									
		.610									
		.650									
		.710		-.0460			-.1770	-.2220	-.1650	-.2260	
		.725									
		.750									
		.760									
		.775									
		.818									
		.834		-.2220			-.1890	-.2280	-.2360		
		.850									
		.857									
		.865		-.2980			-.2970	-.2790	-.3190		
		.910		-.2850							
		.915									
		.950					-.3560	-.3470	-.3410	-.3110	
		.953									
		.965		-.2590			-.4030				
MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.060		Y/BW	X/CW	.299	.364	.427	.534	.673	.785	.887	
		.142		-.1880	.0230	.0780	.3390	.2790	.2920	.2690	
		.150					-.3430	-.3240	-.3790	-.3610	
		.181									
		.186									
		.194		-.0750							

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TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 O2A + S3 + T9 LOWER WING

(RESQ11)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 1 ) = 1.555 BETAT ( 7 ) = 8.060

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.150							
.177							
.229							
.246							
.250							
.362							
.400							
.412							
.497							
.550							
.565							
.610							
.650							
.725							
.750							
.760							
.775							
.818							
.834							
.850							
.857							
.865							
.910							
.915							
.950							
.953							
.965							
.299							
.364							
.427							
.534							
.673							
.780							
.887							
.150							
.177							
.229							
.246							
.250							
.362							
.400							
.412							
.497							
.550							
.565							
.610							
.650							
.725							
.750							
.760							
.775							
.818							
.834							
.850							
.857							
.865							
.910							
.915							
.950							
.953							
.965							
.299							
.364							
.427							
.534							
.673							
.780							
.887							
.150							
.177							
.229							
.246							
.250							
.362							
.400							
.412							
.497							
.550							
.565							
.610							
.650							
.725							
.750							
.760							
.775							
.818							
.834							
.850							
.857							
.865							
.910							
.915							
.950							
.953							
.965							

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -8.390

Y/BW X/CW	.299	.364	.427	.534	.673	.780	.887
.150							
.177							
.229							
.246							
.250							
.362							
.400							
.412							
.497							
.550							
.565							
.610							
.650							
.725							
.750							
.760							
.775							
.818							
.834							
.850							
.857							
.865							
.910							
.915							
.950							
.953							
.965							
.299							
.364							
.427							
.534							
.673							
.780							
.887							
.150							
.177							
.229							
.246							
.250							
.362							
.400							
.412							
.497							
.550							
.565							
.610							
.650							
.725							
.750							
.760							
.775							
.818							
.834							
.850							
.857							
.865							
.910							
.915							
.950							
.953							
.965							
.299							
.364							
.427							
.534							
.673							
.780							
.887							
.150							
.177							
.229							
.246							
.250							
.362							
.400							
.412							
.497							
.550							
.565							
.610							
.650							
.725							
.750							
.760							
.775							
.818							
.834							
.850							
.857							
.865							
.910							
.915							
.950							
.953							
.965							

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TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 O2A + S3 + T9 LOWER WING

(RSX111)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CP

MACH ( 2 ) = 2.000 BETAT ( 1 ) = -0.390

Y/BW X/CW	.299	.364	.427	.534	.673	.785	.857
.590							
.565			.1660	.1840	.1130		
.600						.5330	-.5030
.650							
.700	.1770			.5750	.1010		
.725							
.750						-.5560	-.5740
.760			.0570				
.775				.1460	.5390		
.808			.0210				
.834	.0550						
.850				-.5120	-.1030	-.1070	
.857			.0000				
.865	-.0280						
.900	-.5180		-.0170	-.5270			-.1110
.905							
.950			-.5690	-.5660	-.5860	-.5410	
.953							
.965	-.1430						

MACH ( 2 ) = 2.000 BETAT ( 2 ) = -0.340

Y/BW X/CW	.299	.364	.427	.534	.673	.785	.807
.500							
.550	.0250	.1350	.4090	.7920	.7750	.7820	.8050
.581				-.5650	-.1130	-.1250	-.1190
.586			.5780				
.594	.1130						
.590				.5420	-.5610	-.5240	-.5110
.577			.5710				
.229	.0890						
.246		.1280					
.250				.5490	-.5430	-.5150	-.5060
.362	.1050						
.400				.1550	.1160		-.5030
.402			.1770				
.497	.0410						
.550			.1240	.1390	.5850		
.565							
.600							
.650							-.5060
.700	.1230						
.725				.5280	.5590	.5420	
.750						-.5070	-.5050
.760			.5160				
.775				.5010	-.5640		

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TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 ORA + S3 + T9 LOWER WING

(250111)

SECTION ( 1 ) LOWER WING

DEPENDENT VARIABLE CF

MACH ( 2 ) = 2.0000 BETAT ( 2 ) = -6.340

Y/BW X/CW	.299	.364	.427	.534	.673	.785	.887
.808			-.0300				
.834	.0220			-.0480	-.0290	-.0280	
.850			.0440				
.857							
.865	-.0550			-.0895			-.0230
.900	-.0570						
.905			-.0300	-.0880	-.1130	-.0730	
.950			-.0940				
.953							
.955	-.1540						

MACH ( 2 ) = 2.0000 BETAT ( 3 ) = -4.290

Y/BW X/CW	.299	.364	.427	.534	.673	.785	.887
.0440		.1110	.3690	.7210	.6710	.6730	.7280
.050	-.0050			-.0340	-.1460	-.1470	-.1450
.081		.0820					
.086							
.094	.0690			-.0240	-.0830	-.1140	-.1410
.150			.0420				
.177							
.229	.0880						
.246		.1060					
.250				-.0480	-.0820	-.0740	-.0880
.362	.0900			.0840	.1180		-.1640
.400			.1250				
.437	.0140			.0510	.0260		
.550			.0680				
.565							-.0390
.600						-.0280	
.650	.0590			-.0120	-.0430		
.700							
.725						-.0730	-.1140
.750			-.0260				
.760				-.0410	-.0720		
.775			-.0750				
.800							
.834	-.0290			-.0870	-.0650	-.0880	
.850			.0440				
.857							
.865	-.0810						-.1310
.900	-.1350			-.0270			
.905			-.0580				
.950				-.0340	-.1440	-.1240	
.953							
.955			-.1150				

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TABULATED PRESSURE DATA - 1A98  
ANES 97-107 1A9 02A + S3 + TS LOWER MING

(REBOL11)

SECTION ( 1 ) LOWER MING		DEPENDENT VARIABLE CP									
MACH ( 2 ) = 2.000 BETAT ( 3 ) = -4.290		Y/BL	.299	.364	.427	.534	.673	.780	.897		
		X/CM	.963	-.1770							
MACH ( 2 ) = 2.100 BETAT ( 4 ) = -.180		Y/BL	.299	.364	.427	.534	.673	.780	.897		
		X/CM	.963	-.1770							
		.100	.0640	.0300	.2610	.6170	.5340	.3190	.5410		
		.050				-.1160	-.1810	-.1950	-.1374		
		.081		.0230							
		.146		.0730							
		.094	.0260								
		.130				-.0640	-.1310	-.1580	-.1940		
		.177			.0080						
		.229	.1510								
		.246		.0050							
		.230				-.0660	-.1210	-.1394	-.1330		
		.360	.0360			.0310	.0270		-.1180		
		.431			.0490						
		.402									
		.497	-.0250			-.0160	-.0430				
		.530			-.0210						
		.565									
		.600									
		.690									
		.700	-.0400								
		.720				-.0610					
		.750									
		.760									
		.770									
		.808									
		.834	-.1240								
		.850				-.1660	-.1420	-.1360			
		.857			.0040						
		.865	-.1560								
		.900	-.1760			-.1530					
		.905			-.1790						
		.930				-.1920	-.1850	-.1710			
		.950			-.1780						
		.953									
		.963	-.2260								
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990		Y/BL	.299	.364	.427	.534	.673	.780	.897		
		X/CM	.963	-.1770							
		.100	.0640	.0300	.2610	.6170	.5340	.3190	.5410		
		.050				-.1160	-.1810	-.1950	-.1374		
		.081		.0230							
		.146		.0730							
		.094	.0260								
		.130				-.0640	-.1310	-.1580	-.1940		
		.177			.0080						
		.229	.1510								
		.246		.0050							
		.230				-.0660	-.1210	-.1394	-.1330		
		.360	.0360			.0310	.0270		-.1180		
		.431			.0490						
		.402									
		.497	-.0250			-.0160	-.0430				
		.530			-.0210						
		.565									
		.600									
		.690									
		.700	-.0400								
		.720				-.0610					
		.750									
		.760									
		.770									
		.808									
		.834	-.1240								
		.850				-.1660	-.1420	-.1360			
		.857			.0040						
		.865	-.1560								
		.900	-.1760			-.1530					
		.905			-.1790						
		.930				-.1920	-.1850	-.1710			
		.950			-.1780						
		.953									
		.963	-.2260								
MACH ( 2 ) = 2.000 BETAT ( 5 ) = 3.990		Y/BL	.299	.364	.427	.534	.673	.780	.897		
		X/CM	.963	-.1770							
		.100	.0640	.0300	.2610	.6170	.5340	.3190	.5410		
		.050				-.1160	-.1810	-.1950	-.1374		
		.081		.0230							
		.146		.0730							
		.094	.0260								
		.130				-.0640	-.1310	-.1580	-.1940		
		.177			.0080						
		.229	.1510								
		.246		.0050							
		.230				-.0660	-.1210	-.1394	-.1330		
		.360	.0360			.0310	.0270		-.1180		
		.431			.0490						
		.402									
		.497	-.0250			-.0160	-.0430				
		.530			-.0210						
		.565									
		.600									
		.690									
		.700	-.0400								
		.720				-.0610					
		.750									
		.760									
		.770									
		.808									
		.834	-.1240								
		.850				-.1660	-.1420	-.1360			
		.857			.0040						
		.865	-.1560								
		.900	-.1760			-.1530					
		.905			-.1790						
		.930				-.1920	-.1850	-.1710			
		.950			-.1780						
		.953									
		.963	-.2260								





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TABULATED PRESSURE DATA - 1A98

AMES 97-707 1A9 O2A + S3 + T9 LOWER WING

(RBD111)

DEPENDENT VARIABLE CP

SECTION ( 1 ) LOWER WING

MACH ( 2 ) = 2.000 BETAT ( 6 ) = 5.980

Y/BW X/CU	.299	.364	.427	.534	.673	.780	.887
.590							
.565							
.600							
.650							
.700							
.725							
.750							
.760							
.775							
.808							
.834							
.850							
.857							
.865							
.900							
.935							
.950							
.953							
.965							
.299							
.364							
.427							
.534							
.673							
.780							
.887							
.0650							
.0280							
.1570							
.3680							
.3220							
.2750							
.3810							
.2490							
.1340							
.2140							
.2360							
.0120							
.0140							
.0120							
.0420							
.0120							
.0360							
.0410							
.0210							
.0810							
.1090							
.1920							
.2110							
.0620							
.1030							
.1810							
.0600							
.1540							
.1350							
.1700							
.1200							
.1350							
.1990							
.1960							
.1790							
.1560							
.1850							
.1490							
.2250							

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 8.040

Y/BW X/CU	.299	.364	.427	.534	.673	.780	.887
.590							
.565							
.600							
.650							
.700							
.725							
.750							
.760							
.775							
.808							
.834							
.850							
.857							
.865							
.900							
.935							
.950							
.953							
.965							
.299							
.364							
.427							
.534							
.673							
.780							
.887							
.0650							
.0280							
.1570							
.3680							
.3220							
.2750							
.3810							
.2490							
.1340							
.2140							
.2360							
.0120							
.0140							
.0120							
.0420							
.0120							
.0360							
.0410							
.0210							
.0810							
.1090							
.1920							
.2110							
.0620							
.1030							
.1810							
.0600							
.1540							
.1350							
.1700							
.1200							
.1350							
.1990							
.1960							
.1790							
.1560							
.1850							
.1490							
.2250							

TABULATED PRESSURE DATA - 1A98

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AMES 97-707 1A9 C2A + S3 + T9 LOWER WING

(RBOL11)

DEPENDENT VARIABLE CP

SECTION ( 1 ) LOWER WING

MACH ( 2 ) = 2.000 BETAT ( 7 ) = 0.040

Y/BW	.299	.364	.427	.534	.673	.780	.687
X/CW							
.808			-.1970				
.834	-.1970						
.850			.0000				
.857							
.865	-.2180						
.900	-.2190			-.2200			-.2000
.905			-.2190				
.950				-.2380	-.2180		-.2460
.953			-.2490				
.965	-.2150						